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ABSTRACT

The specific objectives of the HEGIS conference reported in this document were: (1) to develop and publish a set of recommendations for the future content and conduct of the HEGIS program; (2) to develop and publish a set of recommendations for the survey instruments to be used in HEGIS VII for the years 1972-73; (3) to develop and publish guidelines and both long- and short-range plans for the further development of cooperation, coordination and cost-sharing between the states and the federal government for the purposes of data acquisition, processing, and dissemination; (4) to obtain consensus among the conferees on the priorities assigned to the recommendations; and (5) to develop recommendations for specific mechanisms for implementing conference recommendations. Such recommendations, plans, and guidelines are presented in the present report. (HS)

FINAL REPORT

SEVENTH ANNUAL CONFERENCE ON
HIGHER EDUCATION GENERAL INFORMATION SURVEY (HEGIS)

CONDUCTED BY: AMERICAN COUNCIL ON EDUCATION
CENTER FOR RESEARCH AND DEVELOPMENT
IN HIGHER EDUCATION AT BERKELEY
EDUCATION COMMISSION OF THE STATES
NATIONAL CENTER FOR HIGHER EDUCATION
MANAGEMENT SYSTEMS AT WICHE
STATE HIGHER EDUCATION EXECUTIVE OFFICERS
ASSOCIATION

UNDER CONTRACT WITH: HIGHER EDUCATION SURVEYS BRANCH,
NATIONAL CENTER FOR EDUCATIONAL
STATISTICS
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JUNE 21 - 25, 1971
DULLES MARRIOTT HOTEL
WASHINGTON, D. C.

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June 21-25, 1971
Washington, D.C.

Conducted by

American Council on Education
Center for Research and Development in Higher Education at Berkeley
Education Commission of the States
National Center for Higher Education Management Systems at WICHE
State Higher Education Executive Officers Association

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Office of Education/National Center for Educational Statistics

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The Conference of which this publication is a report was conducted under the same contract by a consortium of the American Council on Education, the Center for Research and Development in Higher Education at Berkeley, the Education Commission of the States, the National Center for Higher Education Management Systems at WICHE, and the State Higher Education Executive Officers Association.

FOREWORD

The U.S. Office of Education's Higher Education General Information Survey (HEGIS) was mailed to the institutions of higher education in the fall of 1966. It was developed from a series of individual surveys mailed at different times in years past. The single, consolidated package was developed at the request of the higher education community, which consists of the institutions of higher education, the various voluntary associations of these institutions and of professional groups within the institutions, and the Federal, State, and local governmental agencies which assist, and benefit directly from, higher education. Representatives of that community gathered at the Office of Education early in 1966, in the first HEGIS conference, to assist in the development of this new concept.

The close cooperation of the higher education community with the National Center for Educational Statistics in the planning of HEGIS has continued, with the annual HEGIS conference being the principal vehicle for the expression of the community's advice.

After 6 years of HEGIS, NCES broadened the scope of the seventh HEGIS conference to put HEGIS in context with the other data-acquisition activities that might be needed and to put the project in historical context by looking at what HEGIS could and should do in the decade ahead in order to make the maximum contribution to the solution of the decade's anticipated problems. The device used was to circulate a Request for Proposal (an invitation to make a proposal for a contract). The response was the formation of a consortium of the American Council on Education, the Center for Research and Development in Higher Education at Berkeley, the Education Commission of the States, the National Center for Higher Education Management Systems at WICHE (Western Interstate Commission for Higher Education), and the State Higher Education Executive Officers Association, which submitted a joint proposal, accepted by the Office of Education, for the staging of the HEGIS VII Conference.

The conference was held on June 21-25, 1971, and the Final Report was made to NCES on September 30, 1971.

The Final Report is an accurate reflection of the various concerns of the higher education community as expressed at the conference. As might be expected in a meeting attended by a diverse group with diverse interests, the concerns and recommendations are not entirely compatible. Thus, before NCES is still the task of fashioning a HEGIS for 1972-73 that will be maximally responsive to the higher education community while staying within the various constraints that are inherent in the operations of any government agency.

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Higher Education Surveys Branch
Division of Survey Planning and Analysis
National Center for Educational Statistics

FINAL REPORT
SEVENTH ANNUAL HEGIS CONFERENCE

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INTRODUCTION

The Seventh Annual Conference on the Higher Education General Information Survey (HEGIS) was conducted by the following organizations under a contract with the National Center for Educational Statistics:

The American Council on Education
The Center for Research and Development in Higher
Education, University of California, Berkeley
The Education Commission of the States
The State Higher Education Executive Office
Association
The National Center for Higher Education Management Systems at WICHE

The specific objectives of the conference were:

- 1) To develop and publish a set of recommendations for the future content and conduct of the HEGIS program
- 2) To develop and publish a set of recommendations for the survey instruments to be used in HEGIS VII for the years 1972-73
- 3) To develop and publish guidelines and both long- and short-range plans for the further development of cooperation and coordination and cost sharing between the states and the federal government for the purposes of data acquisition, processing, and dissemination
- 4) To obtain consensus among the conferees on the priorities assigned to the recommendations
- 5) To develop recommendations for specific mechanisms for implementing conference recommendations

In order to achieve these objectives, approximately 100 representatives of institutions, associations, and state and federal agencies were invited to attend a conference in Washington, D. C., on June 21-24, 1971. The conference was conducted in five separate stages, each somewhat more specific than preceding stages. First, three selected speakers addressed themselves to the topic "The Major Decisions Facing Postsecondary Education During the Decade of the Seventies." Second, a panel of higher education researchers discussed, in somewhat more general terms, the data needed to support the decision-making process. Third, the conference participants met in small work groups to discuss in depth specific questions which grew out of the discussions in the previous stages. Fourth, the major recommendations of these work groups were summarized and discussed. Finally, a small group of conference participants addressed themselves to the problem of making specific recommendations regarding the HEGIS VII package.

A draft report of the conference proceedings, minus those portions dealing with the first two stages, was prepared by the staff of the National Center for Higher Education Management Systems at WICHE and was circulated to all conference participants for the purposes of verifying the accuracy of the report and of soliciting further comments. These comments have been incorporated in the final report in two ways. Where the comments corrected errors or served to clarify, they were included in the text of the report. Those comments which represented further comments on the issues discussed during the conference have been collected in an appendix since they, while being extremely useful, cannot be considered a part of the conference proceedings.

SECTION A

THE ISSUES IDENTIFIED

THE ISSUES IDENTIFIED

The purpose of the Higher Education General Information Survey is to collect data which will satisfy the basic information requirements of decision makers at various levels in the higher education community, particularly at the institutional, state, and national levels. Thus, to be useful, HEGIS must be relevant to the major issues and major decisions facing this community.

In order to provide the backdrop of the global issues about which critical decisions must be made in the coming years, three individuals considered particularly competent to speak on the topic of "The Major Decisions Facing Postsecondary Education During the Decade of the Seventies" were asked to address the conference. This section of the conference report contains edited transcripts of these presentations.

THE MAJOR DECISIONS IN POSTSECONDARY EDUCATION DURING
THE DECADE OF THE SEVENTIES

Francis Keppel
Chairman of the Board
General Learning Corporation

I feel a little bit like Rip VanWinkle. This is the first conference associated with the Office of Education I've attended since I left town. May I start by congratulating Alex Mood, Mrs. Gilford, and Mr. Drews. Rip VanWinkle sees an astonishing difference since 1966. Many of you may have forgotten how much has been accomplished as you watched the programs grow step by step.

Let me take what might be called the management view, taking up five issues. First, it seems fair to assume that those providing the financial support for both public and private institutions will increasingly apply management and cost controls as a part of their funding mechanisms. The difference between the management policies of federal, state, or private sources is not likely to be very great. For example, look at one of the bills that got on Governor Rockefeller's desk from the New York State legislature, which involved putting a limit on the number of teaching hours for each professor - at least fifteen for two-year colleges, twelve for four-year colleges, and nine for universities. It would apply to private as well as public colleges. Obviously, such measures of cost control are very crude, but it is a straw in the wind. The policy issue for your consideration could be put this way, "Will future financing be contingent on formulae based on income and expenditure data from individual institutions?" To me this suggests that in the future it may be necessary to collect what in business would be called balance sheet data plus trend lines to aid in cost controls. Presumably, there may also be involved what in business would be called product line data and program information.

Second, Rip VanWinkle can't help noticing that in 1971 the same factor seems to apply to higher education that was becoming clear in 1961 in the primary and secondary schools; i.e., that we have information on almost everything except what the student learns. Commissioners of Education have had to go before the Congress with data demonstrating the age of buildings, the materials they were made of, the age of the teachers--but nothing on what the children learned. It was always embarrassing when asked about qualitative differences to have to reply with data on the number of broken windows--because that was the data available. It is surely possible that those in charge of increasing the amount of state and federal funds will demand qualitative information on learning. Clearly there are deeper and more fundamental issues and attitudes of student career styles that should be considered. But for the purposes of this part of the discussion, let us

assume that the demand from top "management" will be for data on whether and how well students learned the usual subjects. Therefore, the question may be, "Will HEGIS or some other group have to engage in something comparable to the National Assessment program, now designed for the primary and secondary level?"

Third, let us assume that by the end of this decade we will have a substantial degree of unionization of university and college faculties. Whether this is right, I don't know, but let us assume it. Much of the negotiation will, in practice, take place at the state level. If we have 75% of the institutions under public control and/or public finance, in practice the faculty representatives will discover that they have much more impact if they get together and argue with the state than they do if they argue one at a time with their boards of trustees. What the implications may be as far as data collection is concerned is beyond my competence, but it might have something to do with the attitudes of faculty. I gather there is not much of that collected now, but it is at least a possibility that management will be interested in the attitudes of faculties, because the only way it can successfully negotiate would be to maintain the loyalty and interest of faculty members.

Fourth, the outsider looking at higher education in the 1970's has to ask how much further balkanization can go. The present trend seems to be toward raising barriers between states by the increase in charges for out-of-state students. We seem to be going (except for the private institutions) in the reverse of the concept of the United States. Maybe the Commissioner of Education should become a Commissioner of the Interstate Commerce Commission in order to assure cross state academic commerce. I do not know whether data is available on the nature and extent of the flow from one part of the country to another of students in higher education, and whether historical data is available on that topic. I start personally from the position that it is in the national interest to encourage, after the age of 16 or 17, a great deal of motion geographically and culturally from one part of the country to the other. I assume that present policies have the opposite effect--but I do not really know. This is a policy question likely to come up in state legislatures and, perhaps, in ways of federal funding. The nation can, after all, reward or discourage such flow by federal policies. The question on which data may be needed, therefore, is: "To what extent do present policies encourage or restrict cross-state movement?"

Finally, an obvious question is, considering open universities and all the talk about teaching aids, cassettes, etc., "Will higher education end up with some kind of individual educational passport that can help the bearer to move around more easily?" I take it that HEGIS is not now set up for such a service. The final question, therefore, is whether by the end of the decade the combination of the first four questions that I raised may not require the provision of something comparable to an educational passport, and whether HEGIS may not have to initiate, if not itself direct, a new national service.

THE MAJOR DECISIONS IN POSTSECONDARY EDUCATION DURING
THE DECADE OF THE SEVENTIES

Peter P. Muirhead
Deputy U. S. Commissioner of Education

I'm delighted to be here, if for no other reason than to pay tribute to the National Center for Educational Statistics and for the excellent work that the Center has done under the Higher Education General Information Survey (HEGIS).

It seems quite appropriate that this conference be held in the shadow of the Dulles airport. Dulles airport is an excellent example of planning but it is also an example of a facility that isn't being used to its full capacity. I would venture a prediction that in the 1970's both Dulles airport and HEGIS will have to be used a good deal more adequately than they have been used up to now.

Let me quickly get to the points that I would like to share with you under the general heading of major decisions facing us in postsecondary education in the 70's. I have selected three. Let me enumerate them for you and then very quickly make a few remarks concerning each. I think during the 1970's that we will decide to provide an equal opportunity for education that constitutes a reality rather than a promise in this nation. I think during the 1970's that we will see to it that postsecondary education is suited to the range of abilities and interests of not merely 20% of the high school graduates who went on to college during the lifetimes of some of us, but the 70% of the high school graduates who will be going on beyond high school in the seventies. I commend the organizers of this conference in their use of the words postsecondary education because it is really postsecondary education we should be talking about and not higher education in the more narrow academic sense that many of us characterized it in the past. The third decision I think that will be faced up to in the 70's is how can we equitably and effectively provide federal support for institutions without federal control.

First, concerning the decision confronting us in providing an equal opportunity for education, I think we're going to face up to the fact that we have heard a good deal of rhetoric about equal opportunities in America. The situation as it exists today, despite valiant attempts to resolve it, is that if a student comes from a family earning from \$3,000 to \$4,000, his or her chances of going to college are about one-fifth that of a youngster who comes from a family earning from \$12,000 to \$15,000. I think we'll have to face up to that decision in the full realization that higher education will continue to be a growth industry. While we will not see the doubling of enrollment in higher education in the 1970's that

we saw in the previous decade, I need not call to the attention of this audience that we will see a quantitative increase in enrollment during the 1970's that is equal to the increase that took place in the 1960's.

Indeed, if we are in any measure successful in meeting the objective of providing equal opportunity, we will see an even larger growth in post-secondary education. I think that the costs to students for higher education are going to go only one way and that is up on a steadily rising curve. We're going to recognize, as the Congress has already recognized, that the costs of higher education are becoming increasingly burdensome for families with a widening range of income than is now the case. I don't have to share with you that, from my perspective as Deputy U. S. Commissioner of Education, I hear constantly that, while it continues to be an intolerable burden for low income families to support their children's postsecondary education, it is becoming increasingly difficult for families in middle and upper middle income levels. I think that we're going to find, as we make opportunities available to increasing numbers of young people, and as the costs of education increase and become increasingly burdensome for higher income families that we will have to turn to the use of more credit for helping to pay for student assistance costs.

I think we've reached a very important watershed in higher education in America in that we need to know what the impacts are of the use of credit in helping to pay the costs of higher education. What effect will the use of credit have upon young people? Will the effect vary according to a student's family background? What indeed are the effects upon society when increasing numbers of young people have to borrow money to pay for the costs of higher education? We are witnessing now, I think, some very exciting and indeed promising proposals such as the tuition deferral plans developed at Yale and Duke under the auspices of the Ford Foundation. But all too often the decisions we have to make are made on the basis of grossly inadequate information. On a matter as crucial to our society as this, it seems to me that we need to have more data on the impact of increasing use of credit to pay for higher education.

In the 1970's, if we are indeed going to make the decision to promote equal opportunity for education, we must continue to take a good hard look at how adequately we are serving minority groups. We know little about the education of minority students at the professional and graduate level. If, indeed, equal opportunity for education is going to become a reality rather than a promise, we have to open up graduate and professional opportunities for minority groups.

The latest information we have is that of all the Ph.D. candidates in the liberal arts in the United States the percentage of blacks is 7/8 of 1%. We need to know more about ways in which we can open up doors for the education of minority groups.

And certainly we need to do something about getting information concerning the discrimination against women in postsecondary education. We have kept this problem of discrimination in the wings for too long but it has come center stage now. This administration has seen fit to change the executive order concerning civil rights to include discrimination based upon sex. But we have been caught stammering and stuttering as a result of not knowing just how much discrimination there is. What we do know indicates quite clearly that we need to do a great deal of opening up opportunities for women in higher education.

Let me move then, if I may, to the second of these issues that I mentioned. That is the kind of postsecondary education suited to the new mix of students that we now have and we will have increasingly in the 70's. I choose to call this issue the revitalization of postsecondary education. In order for that to come about I think we have to have a good deal more information about the programs and studies that are available to high school graduates as they embark upon postsecondary education. We need to know more about programs that can be characterized as career education not necessarily related to baccalaureate degrees. We need to know more about that recently exploding phenomena of American higher education, the community college. We need to know more about what the mission of the community college is now, or should be, and how effectively that mission is being carried out in community colleges. We need to find a way for vocational education at the postsecondary level to correlate its efforts with those of the community colleges and the four-year colleges.

Cooperative education is another area that we know very little about. We need to explore how industry and colleges can effectively work together to meet the needs of students and the increasingly sophisticated manpower requirements of our society. For example, we need to find ways young people seeking a postsecondary education can drop out for a time and work, if you will, and re-enter educational institutions later after some practical experiences with the work-a-day world.

I should like to introduce, also, the question of accreditation. If we are going to see a revitalization of postsecondary education, then I think we have to have a very searching and frank review of accreditation standards. Hopefully, such a review would urge accrediting associations to move into new areas of postsecondary education including vocational and technical education and to encourage rather than inhibit innovation and change.

Obviously, we're going to see many new thrusts for postsecondary education. We have just begun to think about how to use effectively educational technology. We are seeing innumerable efforts around the country that are replicating the open university concept in Great Britain; the Office of Education has seen fit this year to encourage and assist the University

Without Walls. Those are but examples of many other innovations that we will see unfolding in the 1970's, and as the federal interest is going to be directed toward encouraging that, then we need to have a good deal more information about them.

Let me move to the last point on my list; the question of whether federal support need necessarily mean increased federal control of postsecondary education. I think, first of all, that the threat of federal control is more mythical than real. It is sometimes used as a subterfuge to avoid fiscal responsibility. But having said that, I think you would agree with me that in order to keep that "so called" threat mythical, we have to maintain eternal vigilance. I thought Frank Keppel, when he was Commissioner of Education, addressed this question effectively: "Will the increased federal support for higher education lead to federal control?" He answered: "No, I don't think so. We are pursuing a course of benevolent influence rather than malevolent control." I think the constructive attitude for the federal government should be to use the federal resources to influence innovations and reform of postsecondary education but to avoid anything further than that which would smack of federal control.

We have reached another watershed with regard to whether or not the federal government should move further in the direction of institutional support. We have already crossed over the bridge as to whether or not the federal government should be involved in student assistance, and as to whether or not the federal government should ask the assistance of the universities in carrying on federal missions. Those are well established concepts. We are now reaching a moment of decision about whether federal resources should be used in support of a postsecondary institution's own mission. I don't need to report to this group that there is a great consensus in the higher education community that the answer to that question is "yes." But while there is agreement on the need for institutional aid, there is no such consensus as to how such aid should be given. There are as many ways of giving aid as there are categories of higher education in the United States. HEGIS, it seems to me, has a very crucial role to play here in helping the decision makers to arrive at an equitable and effective solution to that problem. Rightly or wrongly those of you who are statisticians, and those of you who are economists, must realize that in the last analysis these decisions are made by generalists. And in order for generalists to make decisions they have to have information that they understand.

I have noted that we are now involved in what I characterize a classic debate in the United States as to what should be the proper role of the federal government in support of institutions. Everyone is in favor of reaching for an equitable and effective way to perform that task. But as we look at the information we have on hand, for example, trying to take

some measure of the financial needs of institutions, our instruments seem very blunt indeed. We really don't know how to transfuse the federal resources into the bloodstream of higher education to make it healthy again. This to me must be high on the list of HEGIS concerns in the 1970's. Should institutional aid come about as a result of a general formula distribution? On the face of it that would seem to be a most inequitable way to do it because we are not linking it with the problems that are facing higher education. Should it be targeted to serve a national objective? Probably at this time with limited federal resources that is as good a position as there is until we know more about the problem of financing higher education. In other words, we need to have a sound base of information to stake out a claim for scarce federal resources, which are not going to become any less scarce in the 1970's. We need to know more about the financial plight of institutions; whether that condition is temporary or chronic; we have to find a better way of diagnosing the ailments of higher education; we have to devise better ways of utilizing public funds be they federal, state, or local resources.

Frank Keppel gave a very good illustration a few moments ago: how ineffective it is for the federal government to say that it's in the national purpose for everyone to seek a postsecondary education and then to stand by and watch all kinds of barriers being built up within the states to discourage students from seeking an education. We need to persuade the states that it is both educationally and fiscally sound for them to take a broader view of serving young people. We need to find ways so that this greatly diversified operation of public and private institutions that we call higher education, and that all of us cherish, will continue. You must know that the federal government has said that public and private higher education institutions together constitute a great natural resource and we should deal with both systems as even-handedly as possible. But that position may fall of its own weight when you consider that most states have not accepted a responsibility for supporting both public and private postsecondary education. Indeed, if we move into federal institutional aid for public and private postsecondary institutions, we need a much clearer picture of the total mission of both kinds of institutions than we have so far.

These, then, are some of the decisions I think we face in supporting postsecondary education in the 70's. You could make a better list and I'm sure a longer list. I think you would agree, however, that these issues are important enough to warrant the conclusion that if HEGIS had not been established and nurtured by Dr. Mood and Dr. Gilford, we would have to create it.

THE MAJOR DECISIONS IN POSTSECONDARY
EDUCATION DURING THE DECADE OF THE SEVENTIES

Frank Newman
Associate Director of University Relations
Stanford University

I didn't want to pass by one thing you said, Dr. Keppel. Lyman Glenny, our chairman, in referring to your connection with Harvard said "least of all, your connection with Harvard." Now that's a point of view with which I've been very much in sympathy until recently when they appointed a Stanford man as the president. That, I think, must now change the circumstances.

When we look at the policy decisions that are coming up in the 1970's, there is a point that hasn't been mentioned that deserves attention, and that is, how much should public policy become a factor in the planning of the higher education community. Up until now when we in higher education have said that the federal government and the state governments have a responsibility in higher education, I think that has largely meant that they should put up more money. We do recognize that there is somehow a sense of the public responsibility that we have within higher education, and we've even had a little discussion about it, but by and large we haven't yet accepted as a real gut feeling that there is a public policy or relationship and that it must have a significant influence on the way we conduct our business.

In the 1970's, I think it's going to be necessary that we begin to face up to this responsibility, much as other segments of society such as business have suddenly been forced to face the question of their public responsibility. For example, less than 25 years ago when one talked about a student going to medical school, this was viewed as a matter largely between the student and the medical school. Now because of the changing nature of medicine, and the changed nature of our society, we no longer accept that simple relationship. We are concerned about a great many other things. We are concerned about the total supply of medical school graduates. And not simply whether there are enough, but their geographic dispersion has become a major public issue. We are concerned about who it is that becomes members of this very elite group of citizens. We're worried about minorities and women. In other words, there is a public question involved here, the question of the make-up of the entering and graduating groups.

We're worried about what new fields there are in medicine. The federal government was the main force in bringing into being the whole field of biochemistry and now is the main force in forcing serious action about the question of paramedical education. We're worried about the validity and the excellence of research, the scale of research, and the application of research and its translation into medical care.

And above all we're at this point concerned about costs, the cost of every one of those steps. When one reflects on this change, then one can see the tremendous transformation this must mean in our acceptance within the higher education community of public policy as having an impact on us. We still have a long way to go in somehow realizing this and then beginning to react to it on the campus. And it has a fundamental impact on what we want statistics for, not only from the federal point of view, but from the campus view as well. One effect of this rising importance of public policy in higher education is that we should recognize that often the issues of higher education stem from the issues of larger societal concerns. We are concerned about the medical schools as I was describing because we are now concerned about the process of medical care in the United States. In other words, the one flows directly from the other. The same thing might be said to be true about the minority programs of higher education: They are a result of the civil rights movement in the larger society. But the impact of the larger society (and its new and fundamental problems) is only one of the reasons that higher education has some new issues.

Two other factors which I believe, have been underestimated are the impact of mass education as opposed to selective or elitist education and the impact of mass public support as opposed to the traditional sources of partial public support plus private support, that existed before. Let me describe just a few changes that I think flow from the concept of mass education. We've intellectualized these a little bit, but we haven't gotten them down in our gut where we're ready to take action on them. First, in a higher education system that now deals with a very large part of the population (Peter Muirhead has mentioned the extension of this in the 70's to an even larger percentage of high school graduates and of the age group) one of the main differences between institutions (and to meet this large number of students we now have a very large number of institutions) has become a sort of layering by chronological type of institution. We have two-year colleges, we have four-year colleges, we have four-year colleges that also have masters programs, and we have universities. These are in essence the alternate ways we presently have of going to college. There used to be very different alternate types of colleges, but today these are the current alternate ways of going to college. Some very natural public policy questions flow out of this when one begins to think of this chronological layering as the main differentiating factor of our higher education system. For example, if one can get a college education, whatever that means, at any one of these various kinds of layers, then one begins to wonder what is the output value for a certain amount of cost. Supposedly we get different results. But are they in fact different? Does a bachelor of arts degree from a student who has gone through two years of community college and then two years of a four-year college -- is that the same thing as a bachelor of arts degree for a student who has gone all four years to a four-year college? The cost is quite different. Do we have any idea of the educational effects of this difference? Do we know what the value added is for the student? These questions are just naturally going to be forced upon us because higher education is now much more in the public domain.

I guess it was Frank Keppel who mentioned that we will inevitably find ourselves trying to measure, in a much more sophisticated way, both the cost of higher education and what we are trying to accomplish. As you know there is a beginning at research in the area of the effectiveness of college education, but it's so slender that we really have hardly begun the job. There seems little doubt that we will undertake much more research in the area of the measurement of the values of a college education, that it will be forced upon us in this decade; but there is a danger that we'll do it very poorly.

The second question that sort of flows out of the two assumptions I noted previously is that higher education has become so significant in our lives, it is such a large expenditure, so many people are involved that we must face the question "Are we, in fact, training people who can function effectively in our society?" We often assume that there is a constancy in our goals and objectives but I would like to argue that there isn't at all. In fact, one of the few things that has been reasonably constant is the subject matter of the statistics collected in higher education. We think of this as changing enormously. That is to say there are more colleges, more students going to college, more degrees being issued; but the one thing that has been reasonably constant is that every year there are more degrees and more students going to college. It is growth itself that has been constant, but the function of higher education and its nature has been changing, I think, traumatically.

For example, take two institutions that I am modestly familiar with, Mills College and Stanford University. Between the wars the function of these two institutions was reasonably well defined. It was, in the case of Stanford, to make sure that fellows completed their stay with gentlemanly C's and entered the ruling class with a degree of polish that allowed them to carry on an urbane conversation at the Bohemian Club. And Mills had a reasonably well defined function, too. It was a place to send your daughter that had a reasonable degree of safety as she matured, and that prepared her to be a polished and thoughtful wife who would match that fellow who went to the Bohemian Club. Nowadays, the function of both these institutions has changed enormously. They no longer see themselves as turning out people with gentlemanly C's at all. They're disappointed when that occurs. Instead they want to be centers of intellectual excellence and scholarly advancement. They want to turn out people who are challenging society. That's a very, very different thing and we've failed to recognize how much our goals have changed.

Now, I think we're in a stage where the educational goals of the institutions are changing once again. However, it is difficult to generalize about it. Across the whole spectrum of institutions and particularly across the spectrum of students, the requirement for change is very different. Being a San Franciscan I'm always reminded of the Chinese New Year's dragon. I don't know if you have ever come to see that; I recommend it. The dragon is so long that while one end of it is going around the corner in one direction, the other end is just barely starting in the opposite direction. And this is the way very much of higher education is. What's happening at the schools that attract a very selective spectrum of students, who come from the suburbs, and who have

led an intellectual life since nursery school (or sometimes even earlier) is different than what is happening at the community college located in an urban area, attracting students who had until recently never considered going on to college. At least one trend clear. At the front end of that dragon, if one can call the most selective universities the front, there's a real and growing question in American life as to whether we are socializing and training students to function effectively in our society or simply training them to be very intellectual and socializing them to be ineffective in our society. One of the problems we must address is the growing evidence that more and more students are uncared-for oriented. That is they are drifting, hanging on in the colleges, anxious to stay on in the college environs. I don't know if any of you saw that marvelous New Yorker cartoon a couple of weeks ago in which the graduating student is up in the tree in his cap and gown, hanging on madly, while his parents down below try and console him, his father's saying, "We didn't know you felt so strongly. Of course, you may stay and go to graduate school."

As we interviewed students we found this was a widespread phenomenon. Now that higher education is such a heavily public-supported function and now that such a large percentage of our young people go through college, must we begin to think about alterations in the pattern of going to college in order that it can become a realistic preparation for achievement in our society? Or are we simply going to give up the question of achievement in our society? I think this is a question we will not be able to avoid.

The third factor I believe will force itself on us (unless it does not become a major issue policy simply because of the well-known American ability to procrastinate thinking about really urgent issues) is that as the number of students coming into college grows and their nature becomes more and more diverse, won't we be forced to think about creating a greater diversity among the institutions? This will be particularly true as the pressure grows to be more realistic about the effectiveness of these institutions. This is going to raise a whole series of questions that will be intimately connected with the kinds of statistics that are concerned. Both Peter Muirhead and Frank Keppel mentioned the importance of thinking more broadly than simply accredited colleges and universities. With the advent of the open university, aren't we going to be forced to face the fact that college, meaning a college type learning experience and maturing process, may be something very different than going to a campus and going through traditional courses? May we also be faced with the question (I hope we will) that there can be very different kinds of institutions.

One of the things that our task force was aware of as we went through our studies was that the value added to the students knowledge and maturity, however crudely one measures this, of institutions that differ from the norm seems to be much higher than the conventional college for certain kinds of students. If that is case, then we must consider how our society creates such institutions and how they evolve. Presently we pay almost no attention in the higher education community to such issues as formation rates. In the business world the statistics about new business formations are very prominent. In the educational world we don't even consider that issue. We don't worry about the change or the

evolution of such institutions. If it weren't for J. B. Hefferlin we'd have very little information at all about which new institutions are like different institutions. This simply implies that we are going to have a different level of demand on our statistical information. HEGIS has created a foundation of information, but I think it's going to be mandatory to find how HEGIS can be accompanied by better analytical effort. Last night we were talking about the difference between higher education and the economists. I must say the economists have it all over us as higher educationalists.

In any academic field, such as economics, we demand rigorous data. But when one deals with higher education, we're all willing to talk off the top of our heads, presumably on the assumption that we know all about it. One of the results of ever better statistics and particularly better analysis of those statistics will be to force us down to bedrock to examine what is really happening. We need a modest, controlled expose of what is going on. Peter mentioned that only 7/10 of one percent of Ph.D.'s are black. The value of knowing that figure is that it demands action. It seems to me what we need to do is get on with the development of the same kind of analysis right across the face of higher education. This in turn will demand action on the part of those of us in the federal and state agencies and the institutions themselves.

SECTION B

INFORMATION NEEDED TO RESOLVE IDENTIFIED ISSUES

INFORMATION NEEDED TO RESOLVE IDENTIFIED ISSUES

After the presentations of the featured speakers and general discussion of the issues raised, a panel of five individuals, decision makers and researchers in the field of higher education, was asked to address the question of information needed in order to approach the resolution of some of these issues. The following five topics were discussed specifically by a member of the panel:

1. Postsecondary Education Beyond the Traditional College or University
2. Are We Preparing to be Effective in Society
3. Equal and Appropriate Educational Opportunities
4. Federal and State Support for Higher Education
5. Management, Cost Benefits, and Value Added

This section of the report contains liberally edited versions of the transcripts of the presentations made by panel members. Comments made by the panelists during the course of the subsequent discussion period have also been included. Finally, this section contains selected comments made by conference participants during the discussion period following the presentation by the panel members.

POSTSECONDARY EDUCATION BEYOND THE TRADITIONAL COLLEGE OR UNIVERSITY

Robert Birnbaum
Office of Research on Higher Education
City University of New York

I base my ideas about data collection from higher education and postsecondary education in the United States on two premises.

The first is the likely increase in efforts to make alternative educational opportunities of a noncollegiate nature available to high school graduates. At least something on the order of sixty million adults every year are reported to be engaged in educational programs in what has been called the educational "periphery" -- television courses, correspondence courses, courses given by various organizations including the military and industry, anti-poverty courses, etc. -- compared to approximately 59 million people enrolled in what has been called the educational "core" -- that is, traditional institutions of elementary, secondary, and higher education. In other words, we've reached the point where as many Americans are enrolled in the educational periphery as are enrolled in the educational core.

Data on these "peripheral" enrollments, however, are very difficult to obtain, and the total impact of the enrollments in these areas on education in the United States is very difficult to determine. If these enrollments increase in the future, as the Newman commission report suggests that they should, then data on them and the analysis of these data are going to become even more critical in the future than they are right now.

The second premise on which I base my requests for data is that it no longer makes sense -- if in fact it ever did -- to separate postsecondary data from elementary and secondary school data. The attendance discontinuities between various levels of education are constantly decreasing. For example, almost no discontinuity now remains between elementary school graduation and entry into high school, and at least in New York City a greater discontinuity now occurs between the junior year of high school and high school graduation than between high school graduation and postsecondary education of one kind or another. At the City University of New York, for example, we have found that 27 per cent of juniors in high school drop out before graduation but only 24 per cent of those who graduate don't go on to postsecondary education. So if anyone continues to collect data on the educational system discretely for the different levels of education, it will be for administrative reasons and not because it's a true reflection of educational and social reality in the United States today.

If these two premises are accurate, data will be needed in at least the following three areas:

First, we're going to need solid enrollment data both in the core and the periphery in postsecondary institutions, and these enrollment data are going to have to be related to enrollment data in elementary and secondary institutions. And we'll have to know not only the number of people involved but we'll have to know their ages; we may want to determine whether we're enrolling high school graduates in peripheral activities; we'll want to know the sex of the students, their ethnic background, and their duration of attendance among other things. Particular attention will have to be paid to determine whether these types of programs are serving any dysfunctional purposes -- for example, whether they serve as a device by which low socioeconomic or racial minority students are channeled away from traditional higher educational programs.

Second, we're going to have to create new output measures. Degrees granted is obviously not going to be an appropriate output measure for noncollegiate postsecondary education if, in fact, it is even an appropriate output measure for traditional higher education, particularly as we establish a policy of creating "stop-out" points for students so that they can leave higher education institutions at any point in their career and then return to them at a later date and pick up at the point they left off. However, there has to be some measure of educational output -- some kind of "gross educational product" by which we can determine how much education of a postsecondary nature is going on at any one time in the United States.

Third, we have to create measures of effectiveness for various types of programs. Are the postsecondary programs which we've established doing what they say they're doing? Are they training people? Are they getting people promoted? Are they making people happy? Are they making them better citizens -- or whatever we have in mind when we set them up? Then we have to compare the cost effectiveness of new types of programs with the traditional programs in higher education which often have a similar if not identical purpose. Among the questions we could then answer, for example, would be whether it is better for a student to enroll in a two-year community-college secretarial-science program or in a six-month proprietary secretarial school.

These are some of the data which I think will have to be collected as we move into a situation in which more and more people are enrolling in noncollegiate postsecondary educational institutions.

ARE WE PREPARING PEOPLE TO BE EFFECTIVE IN SOCIETY?

Lloyd Humphreys
Associate Director for Education
National Science Foundation

We know little about the achievements of students at all levels in our educational system, and there's a good deal of resistance to knowing more -- as the history of the National Assessment program and the difficulty in getting it established illustrates. Ralph Tyler once stated that he thought the prevailing philosophy of education in this country was that of the "laying on of hands," and I would go beyond Ralph only in distinguishing how this philosophy is adopted at the pre-college and college levels.

At the pre-college levels it seems to me that the emphasis is on how the hands are laid on rather than who lays on the hands -- with the definition of the preferred "how" changing from time to time over the years as the tides of education change. In contrast, at the college level -- and even more in universities with distinguished graduate faculties -- this laying-on of hands philosophy seems to emphasize who lays on the hands, since if the faculty members are distinguished, then by definition their students' education is good.

But what does a college graduate know and what can he use in the various roles that he will assume as an adult? I'm not crassly occupational in asking this question: I think the quality of life is very important as a criterion, just as is the graduate's responsibilities as a citizen in a democracy. But we cannot neglect occupational adjustment in training for a career. Perhaps if a small number of our students of college age actually attended college and attained a degree, we could forget about occupational training. But I don't think the traditional liberal arts is a good prescription for the sixty percent or so of our population that will be attending college in the 70's.

This leads me to a point that may go beyond the possibilities for HEGIS, but it seems to me terribly important to marry the traditional demographic statistical approach to education with information on individual differences. The psychologist interested in individual differences has frequently neglected demographic considerations, while the demographer frequently neglects individual differences in counting noses, the number of degrees, and so on. We need to effect this marriage to answer such questions as the effects of education if we are to move more strongly than we ever have in this country toward external examining and external certification of education. We are now involved in a certain amount of external certification. The colleges certify the quality of their entering students: they don't accept the high school diploma completely. And at the graduate level, there is certification for the incoming graduate students because the graduate schools don't accept completely the B.A. degree. But if we

were to move more strongly toward external examination and external certification -- which of course is tied to trying to measure the outcomes of education -- I think the effects would be very profound indeed on education in this country -- on students, on faculty, and on society generally.

EQUAL AND APPROPRIATE EDUCATIONAL OPPORTUNITIES

John K. Folger
Executive Director
Tennessee Higher Education Commission

We've had this problem with us for some time and yet we have not devised a fully satisfactory definition of what we mean by "equality of educational opportunity." I think we all agree it's more than some sort of a body count or some proportion of minority groups in various institutions; but we haven't come to the point -- and we may not come to the point -- where we can define what programs will maximize the life chances for which individuals.

To look at this question of who can be equal and who can rise in the social structure at one time to the top, I think we've got to go beyond collecting statistics from institutions and go beyond cross-sectional surveys of the sort that we have undertaken in the past. HEGIS, in short, is probably not a very good vehicle for studying this problem.

Let me give you one quick illustration here. In the State of Tennessee, approximately twelve percent of the freshmen who are enrolled in regular college -- that's community colleges, four-year institutions, and universities -- are black, while approximately six percent of the college graduates are black. You might conclude from these figures that we are making a lot of progress: that we're bringing in nearly twice as many blacks to our colleges and universities as we did just four years ago. But it is obvious that there's an alternative explanation: that the drop-out rate for the blacks may be roughly twice as great as the other students, and that therefore we are developing not an open door but more of a revolving door for them.

This kind of issue cannot be resolved with cross-sectional statistics, and so we've got to have longitudinal statistics too. But I hope that in collecting longitudinal statistics we not devise the kind of longitudinal system that has to operate for a decade before you find out anything useful from it. Thus I strongly support the notion of getting overlapping longitudinal surveys underway where you may not follow any group of given students for a time span of more than one or two years but you do follow them across certain critical points in their educational careers. From a series of these longitudinal surveys you can compose a more satisfactory picture of where we are and what the nature of our problems is in achieving equality of educational opportunities.

Such data need to be available not only at the national level, where it can be obtained for most purposes from sample surveys, but also at the institutional level and at the state level. Up to now we have not approached this problem so that we meet the data needs of people at the institutional level and at the state level where a lot of planning is required if we're to implement equality. So in summary, I think what

we need is the kind of information which will tell us not only where we are but how we can go about expanding educational opportunity, such as the factors that keep people from entering appropriate postsecondary education -- and we need this data at the institutional, state, and federal levels.

FEDERAL AND STATE SUPPORT FOR HIGHER EDUCATION

H. Reed Saunders
Evaluation Director
Program Planning and Evaluation
United States Office of Education

You are just as aware as I that one of the big policy issues that's come up in recent years is the question of whether or not the federal government should be in the institutional support business on some sort of general basis. This is an excellent question to look at in regard to HEGIS because there are a number of facts that need to be known before one ought to make a decision on this question.

I posed the question, "should the federal government be in the institutional support business?" although most of you, had you posed the question, would have said "what form should federal institutional aid take?" because you start with a different bias than I. Probably any decision that will be made on this question will be a political decision, but yet it probably should not be. At the present time we know very little about the needs for institutional support. We have heard from a number of very general studies that institutions say they need more money - yet the few studies that the Office of Education has commissioned which have looked at very small samples of institutions indicate that institutional aspirations may be a bit different than their needs. We don't have the kind of answer, in short, that we ought to have in terms of the data on which to base a resolution of the question of federal support.

We need to know not only about the amount of money that institutions are spending but what they are spending it on. Is it true that the average number of contact hours of students per instructors has actually gone down over the last few years? If so, the question may be solved one way; if not, another. There are a lot of other things that we need to know to reach a logical conclusion to the question of whether the federal government should be in the general institutional support business. A lot of these things can come from HEGIS. Some do now. More can. In fact, HEGIS can be more than the way to answer questions like this, and it's interesting to speculate on what it might be. If the question of institutional support is answered in the affirmative, and some sort of law is enacted providing for general support of institutions, HEGIS might become the instrument by which institutions get paid. If institutions are to be paid on a head-count basis or some other basis, there's going to have to be valid information on which the federal government can make these payments. It's interesting to sit back and speculate on what would happen to a voluntary cooperative kind of survey such as HEGIS now is, if this sort of legislation were to come into being. It might give Dorothy Gilford a better basis for getting the information she wants -- in fact I'm sure it would if the General Accounting Office approves this kind of basic survey.

MANAGEMENT, COST BENEFITS, AND VALUE ADDED

Alexander W. Astin
Director, Office of Research
American Council on Education

A number of the things that the three speakers this morning said, as well as my colleagues on this panel have said, bear on the question of management alternatives, cost benefits, and institutional effectiveness. For example, Frank Keppel raised the issue of nobody knowing what the student learns, and this is obviously a question of value added or change. When we talk in such terms it seems to me that we're talking about the need for something like longitudinal data. Keppel also mentioned the question of the nature of flow of students across regions. Here again, we have a time variable and implications for a longitudinal look at what's happening.

Peter Muirhead mentioned the question of the re-entry to higher education of the drop-out: again, a longitudinal question. Frank Newman dealt directly with the question of value added and whether or not there's more value added with more dollars -- that is, whether the more affluent institutions that are more costly do in fact show more value added than the have-not institutions.

Bob Birnbaum on our panel this afternoon talked about linking data from elementary, secondary, and higher education levels. John Folger said directly that we need longitudinal data on the question of equality of educational opportunity. Reed Saunders has raised a very basic question that I think can be answered only through longitudinal data: what the probable impact of financial aid or other kinds of intervention is going to be in terms of the educational development of students. And Lloyd Humphreys talked about external certification and program output as illustrated by the National Assessment.

The National Assessment illustrates very well the need for longitudinal studies, since it tells us something about where people are but very little about how they got there. The Colman Report -- another example of a nonlongitudinal study -- was supposed to tell us both where people were and how they got there, but the "how they got there" turned out to be impossible primarily because it was not a longitudinal study.

One study which is longitudinal and which has the potential for answering some questions like this is Project TALENT. I think it's most unfortunate that Project TALENT was not continued in the sense that a new cohort of high school students has not been pursued longitudinally, because its original sample obviously is no longer representative of what's going on in secondary education now. If Project TALENT had been repeated every year or every other year we wouldn't be in this dilemma right now. So I'm suggesting we need a series of longitudinal studies to get around the problem that John Folger mentioned -- the length of time needed to conduct longitudinal studies.

Moreover, I would urge strong consideration of a national program of longitudinal data not only on students but also on faculty. The questions of faculty mobility and faculty productivity are going to be very difficult to answer without longitudinal data.

I suspect that HEGIS and possibly the National Center for Educational Statistics itself is very limited in its ability to collect this kind of data -- it is more concerned with what Lloyd Humphreys calls demographic data. But obviously the two must be married -- the longitudinal and the demographic studies. Assume we collected the longitudinal data needed to determine relative effectiveness of different programs or different institutions. Unless we have at the same time the relevant demographic data -- the descriptive HEGIS-type data about how much is spent for what kind of program under what circumstances at each institution -- we won't be in any position to interpret our longitudinal data -- to understand why institution "A" is more or less effective than institution "B." This is where I see the marriage of the two as being basic to the collection of information for policy.

The following pages contain selected and edited versions of questions and comments of conference participants made during the discussion period which followed the presentations by the panel members.

Lyman Glenny: You've raised a number of possible uses for the data from HEGIS. I wonder if you have any feelings as to the direction HEGIS should go given limited resources.

John Folger: I think there are some things that can be done with limited resources to make the HEGIS data more valuable. Let me use an illustration from the problem of equality of educational opportunity. The statistics that are collected on race are subject to considerable response error, and this response error varies by type of institution. In my own state, the nonresponse rate tends to be greater in the larger and more elite institutions, and blacks are more likely to be nonrespondent than whites. So if you really want to try to find out what the true racial composition of the student population is, you need to make adjustments in the data that are reported on this question. This general problem of response error is one which I think needs a good deal more attention. We have found the same problem plagues the collection of financial statistics. By and large the people who fill out HEGIS forms in the institutions don't stay in these positions very long, and their interpretation of HEGIS definitions is highly variable.

There's been entirely too little work done, I think, on this particular aspect of the quality of statistics. I would say that the magnitude of the response error is so great that it is very difficult to determine whether you're making any real changes or whether you're just getting different kinds of statistics. If I were to say where we should put priorities, I would say on improving the quality of what we're collecting so at least we are able to report how much error we probably have.

Robert Birnbaum: Even if we didn't have such errors, I'm not sure that as it's presently collected HEGIS really gives you very clear data regarding equality of educational opportunity. A good example of the kinds of data that are needed from the community colleges is ethnic data by different kinds of programs. Unless you break some data down by program and relate them to ethnicity, I'm not sure you will really be able to say much about equality of opportunity. About getting into the system, yes -- but where in the system and where students go once they finish their programs are other matters.

Madelyn D. Alexander: We've talked about the cost effectiveness of our programs; we talk about faculty teaching methods; and we keep talking about the users of data. If we're really interested in effectiveness and efficiency in education, I think we have to address ourselves to getting this data back to the decision makers called the students.

Lyman Glenny: I think the panel members would all agree with you that one of the toughest problems the student has is knowing what the opportunities are.

Robert Birnbaum: The student is probably the most depressed consumer in America today. He really has no idea of the range of products available to him. He doesn't know what the products are like, and he's really not quite sure what's going to happen after he purchases them.

We did a study of City University about seven years ago asking people about its free tuition policy, and we found that at a high school located twenty minutes away from one of our community colleges, about twenty percent of the students didn't know that the City University was tuition-free. It's difficult for people to make decisions when they don't have any information, and we found that giving students information about the University has made a big difference in the kinds of choices they make.

Some students are not at all clear about how to use the data even if they have access -- and the same is true for college advisors in the high schools. This problem is becoming more acute as we open up a broader range of alternatives within postsecondary education.

Alexander Astin: In a way I think the student is more handicapped by the lack of longitudinal data that I keep harping about than anyone else. Not being part of the system as are the faculty, administrators, and policy makers, he's really forced to rely on the folklore that is promulgated by the people in the system. A good example of folklore is the student-faculty ratio. Not knowing much about the system first hand, the student is forced to accept this information as meaningful data about an institution, with the implication, of course, that the more faculty per student, the more likelihood the student is to get some attention. This just happens to be an issue where some longitudinal research has been done, and it turns out that the student-faculty ratio has no relationship at all to the amount of attention a student is going to get -- it's zero in relation to the amount of student-faculty contact that occurs. Instead, the main variable is the size of the institution, which does have a fairly causal negative relationship to student-faculty contact at the undergraduate level. But the student doesn't know this; and lacking this information, he has no basis for evaluating the alternatives except in terms of the folklore. Add to the absence of this information the fact that some students don't know that there are large and small institutions to pick among, and I second your concern.

Tom Mason: I wonder if it would be possible to link our immediate problems regarding HEGIS VII with what has emerged as some of the more fundamental issues in the broader discussion? I think one of the funda-

mental problems is that the utility of HEGIS data for large-scale federal level policy making is limited because there is no good way to link (for example) either degree outputs or current enrollment data to the resource data such as space and current expenditures. It seems to me that we must find ways, for example, through the taxonomy and other structures such as the WICHE Program Classification Structure, to find ways to categorize both program data and resource data in such a way that we can finally look at the two together. I think it important to proceed to develop the standard schedules on employees, enrollments, students enrolled for advanced degrees, degrees granted, finance, and facilities in such a way that the data can become analytically meaningful at the federal policy level. Once this is accomplished, it should be possible to proceed to student flows, longitudinal studies, and questions of student mobility.

I would like to emphasize that I, as a provider of data from the institutional level, am anxious to have these data be meaningful and significant at the state and federal policy-making levels.

Justin Lewis: There have been many misstatements made today. Specifically, these have been statements made about the need to gather data which, in fact, are currently available. Many, many things are known, but they haven't been synthesized. As a result, one of the first things we should do is determine the extent to which our needs have already been met. Perhaps we should discuss a way to make what we know more available.

Not only have we been so busy collecting data that we don't take time to find out what other people are doing, we also don't take time to interpret those data which we collect. Analysis and interpretation must be an integral part of the process.

Ted Drews: I would like to point out that there have recently been a number of studies undertaken to specifically find out what it is that we know. Generally we are turning up lots of information, much of which cannot be related one to another. In essence we have not coordinated our data collection and analysis procedures in a way that will allow us to interpret our findings in a way meaningful for national level decisions. Each particular study may be useful in making local decisions. However, in trying to interrelate these studies, the end result is a product that lacks credibility in the eyes of the beholders. As a result, one of the concerns I feel is not only how to bring good techniques to bear on devising the instruments for coordinating the various studies, but how to build credibility into the responses so that when we look at the final result, we have a sense of trust in the other fellow's work.

Lyman Glenny: I think that the priorities to be established are really the priorities for information. As it stands now, many of us are doing

the same things that many of the others of us are doing and the most important things may be things that none of us are doing. As a result, we need to determine what information we need, then how to go about getting it, then how to evaluate it, and finally who does it; not in any reverse orders.

John Folger: I think the major issues are going to change. Limits are going to be defined differently by different political groups. As a result we are not likely to have consensus on the issues at any one time and certainly not over time. As a result, we should develop a general statistical information system which is designed not to answer questions about particular issues but to provide a fairly useful base of data upon which you can build to address particular questions. No general purpose collection system is ever going to answer all questions or be able to anticipate issues five to ten years in advance. I think that we've got to keep in perspective what we can reasonably expect this kind of system to do.

Alexander Astin: It seems to me that while HEGIS is not designed to tackle longitudinal problems, HEGIS can make a major contribution to these studies. I can think of several areas in which HEGIS might be modified, or added to, or subtracted from, in order to make it more useful in the overall scheme of things. For example, many longitudinal studies are required to determine the educational effect of new instructional programs, different delivery systems, and changed pedagogy. Nevertheless, some descriptive information on the varieties of educational programs now being tried out and information concerning which institutions are now using such programs would be very useful. We don't know the frequency of occurrence on the national scale. It seems to me that descriptive demographic data of the HEGIS type ought to be designed to some extent to complement the studies of educational impact that are going on.

SECTION C

WORK GROUP REPORTS

WORK GROUP REPORTS

The presentations by the speakers and the subsequent panel discussions on the first day of the conference served to focus attention on those issues which were viewed as being of major concern by the conference participants. From the issues identified, the members of the Planning Commission selected the following nine topics for discussion in small work group sessions which met on the second day of the conference.

- A. Coordination of Data Collection
- B. Survey Methodologies
- C. Analysis and Accessibility of the Federal Data from Postsecondary Education
- D. Access to Higher Education and Equity of Opportunity
- E. Instructional Modes and Practices, Traditional and Nontraditional
- F. Financing Higher Education
- G. Effectiveness of Postsecondary Education in Serving Personal and Social Needs, Including Manpower Requirements
- H-I. Priorities of the State and Federal Governments for Data from Postsecondary Education
- J. Priorities of Institutions for Comparative Data Within Postsecondary Education

Each of the nine work groups was given a summary charge, asked to discuss the issues identified in that charge, and to prepare a short written statement of the group's recommendations with respect to the issues identified. The charges to each work group, a list of the individuals assigned to the work group, and the reports summarizing their recommendations are reproduced on the following pages. A very limited number of editorial changes have been made to the reports as prepared by the conference participants in order to clarify a statement. In addition, a few additions have been made on the basis of comments received from participants during the review process. Such additions are specifically identified.

WORK GROUP A
COORDINATION OF DATA COLLECTION

Areas of Concern

Development of guidelines for further cooperation among all agencies which require data from postsecondary education. Coordination between states, federal government, and educational associations and organizations. Continued development of uniform standards and procedures for recording data from higher education.

Centralization vs. decentralization. Mechanisms for implementing recommendations of the conference.

Tasks

Draft guidelines for consideration by the conferees of further cooperation, coordination, and cost-sharing between the states, federal government, and nongovernmental agencies of data acquisition, processing, and dissemination regarding postsecondary education. Note existing data collection activities which overlap or duplicate. Determine possible strategies for reducing or eliminating duplication, recognizing possible problems relating to confidentiality or proprietary interests. Develop plans for consideration by the conferees of specific ongoing mechanisms for implementing conference recommendations.

Members

Raymond Hewitt
Mary Hooper
Dennis Jones
Robert Masters

Richard Millard
Arthur Podolsky
Wayne Tolliver
Paul Williams

Recommendations

The problem of effective coordination of data collection, particularly as it pertains to Higher Education General Information Survey (HEGIS), involves, first of all, a clear conception of what the primary purposes or functions of HEGIS are to be. In the view of this group, the purpose should clearly be the facilitation of planning for postsecondary education at the institutional, state, and national levels. This conclusion carries with it a number of implications.

The first is that the structure of HEGIS should be so designed that it will encompass the range of types of information needed for this purpose, both in breadth and depth. This is not to say that the National Center for Educational Statistics (NCES) would be expected to gather all the possible information. Rather, within the framework of HEGIS, institutions, states, and other federal agencies would be able to collect the appropriate data required for their various planning purposes. This means that such agencies as the National Institutes of Health (NIH), the National Science Foundation

(NSF), and others should design survey instruments which are within the HEGIS framework, but which may differ considerably in the degree of specificity.

It also means that, within NCES, development of information for longitudinal data as well as for cross-sectional gathering instruments, studies of such things as occupational education programs, libraries, etc., should be carried out within a single framework. This framework, if carefully developed, would not only be a mechanism for data collection, but would also be an instrument which could provide planning guidance to institutions.

The committee recognized, however, that the primary responsibility for planning postsecondary education resides at the state level. The committee also agreed upon the desirability of assigning to the states primary responsibility for data collection as essential to the successful achievement of the stated objectives.

In order to promote the development of an appropriate structure and to achieve coordination at an operationally feasible level, the committee recommends:

that the states, through their legally designated statewide postsecondary educational planning agencies, be delegated the responsibility for administration, collection, and validation of HEGIS information; and

that the federal government, through appropriate legislation, provide funds for this purpose.

State agencies so funded should be the primary source of information for all federal programs concerned with postsecondary education. The committee would also encourage private agencies seeking information to obtain it through these state agencies while recognizing that there can be no direct controls on duplication and direct inquiries from associations and other such agencies in light of their purposes and special interests.

Specific priority recommendations are:

1. Recognizing the steps in this direction already being taken by NCES, the committee urges NCES to continue the development of a single, comprehensive data structure which is adequate to the planning purposes indicated above. As a corollary to this, it is recommended that HEGIS be expanded to include all aspects of postsecondary education.
2. NCES immediately should undertake discussions with the executive officers of appropriate state postsecondary education planning agencies with the objective of establishing procedures by which collection, validation, and administration can be accomplished effectively at the state level.
3. A continuing effort should be made to insure that legislation providing federal funding for such state activities be enacted. It would be

particularly appropriate if such funding could be obtained in conjunction with general institutional support.

In light of the changing character of higher education, it is the opinion of the committee that annual conferences of representatives from across the higher education community be held to reevaluate the issues and to assess progress toward the established goals. The planning for next year's conference should begin immediately.

WORK GROUP B SURVEY METHODOLOGY

Areas of Concern

Policy issues in sampling and census techniques. Utility of early release of sample data. Encouragement of timely responses. Coordination of HEGIS data with data from non-HEGIS postsecondary programs: proprietary, industrial in-service programs, military, etc. Policy issues in the reliability and validity of survey data. Levels of accuracy. Monitoring or auditing of accuracy.

Tasks

Recommend priorities for consideration by the conferees regarding further improvements in survey distribution and collection and data accuracy.

Members

Charles Andersen
John Davis
Elizabeth Haven
David McNellis
Harold Nisselson

Hazel Poole
Alan Stevens
J. Stiglmeier
Sidney Suslow

Recommendations

Priority Group I

Recommend that the U. S. Office of Education annually provide institutions of higher education and state coordinating units with a nine-month lead time in the definition of the basic HEGIS package.

Recommend that NCES undertake a sampling study within the total 1971 HEGIS universe to provide early release of key data elements. Future sampling activities should be based on careful analysis of the experience in this pilot year.

Priority Group II

Recommend that the U. S. Office of Education encourage institutions of higher education, through all possible means, to develop responsive data systems using standard terminologies such as those contained in the NCHEMS Data Elements Dictionary.

Recommend that the U. S. Office of Education, in cooperation with institutional representatives and representatives of appropriate higher education associations and state coordinating boards, undertake studies to assess and improve the validity and reliability of HEGIS data.

Priority Group III

Recommend that endorsement be given the recent actions taken by the U. S. Commissioner of Education in establishing a mechanism for coordinating data collection activities within the U. S. Office of Education.

WORK GROUP C
ANALYSIS AND ACCESSIBILITY OF THE FEDERAL DATA
FROM POSTSECONDARY EDUCATION

Areas of Concern

Mechanisms for best utilizing data: most useful presentation of survey data by type of publication and level of analysis, such as summary reports, institutional listings, analytic trend studies and projections, etc. Turn-around time. Handling requests for unpublished data. Access to computer tapes. Compatibility of tapes from year to year. Breadth of distribution of preliminary reports. More effective use of scarce resources in disseminating HEGIS data.

Tasks

Recommend priorities for consideration by the conferees regarding further improvements in reporting and publication of survey data.

Make specific recommendations regarding reports of HEGIS VII data.

Members

Madelyn Alexander
Richard Beazley
Norman Brandt
Ted Drews

Robert Hubbard
Joel Johnson
Tom Mason
Lois Torrence

Recommendations

This group has focused upon the following key areas:

1. The means of accelerating timely feedback of certain types of critical data essential to institutional and state decision-making processes, as well as national policy development.
2. The implementation of the Freedom of Information Act and the provisions for authority to furnish information as provided in Public Law 91-230 (Section 417).
3. The need for an integrated survey instrument in HEGIS VII on minority students, including financial assistance.
4. The desirability of moving the resident and migration study up from HEGIS VIII to HEGIS VII.
5. Dissemination of HEGIS data.

Timeliness and Priorities

Reports issued by the Higher Education Surveys Branch of the National Center for Educational Statistics must appear in a timely fashion if they are to be used to any extent by higher educational institutions, concerned state agencies, and others interested in the process and progress of higher education. Perhaps this observation is so self-evident it ought not to require citation, but those responsible for decision making at such levels are troubled that the practice of timely release is simply not followed at present.

We now urge adoption of the most firm timetable for release of those reports of highest interest and need. Acceptance of such a schedule implies that any report planned for release by a specified date would not be released in that form after that date. This is not to suggest that subsequent detailed analysis would be forbidden -- simply that the published date must be followed for the announced release.

We are aware of the serious implications of such a proposal. It calls for acceptance of "unedited" data, something which may not be palatable to educational statisticians, other members of the NCES staff, and perhaps to those of us classed as "users." We believe, however, that successive issuance of such unedited data will have salutary effects on those who supply (and use) the data.

We note also that detailed refinements in analysis will seldom be possible in such a compressed schedule. Perhaps first the optimal data refinements should be listed in descending order from the most gross to the most detailed, with the expectation that degree of refinement would depend upon the time available.

For the purposes of further discussion, leading hopefully to adoption, we submit the following report types and proposed time limits for release, effective insofar as possible for September 1971 - September 1972.

<u>REPORT</u>	<u>DATE OF RELEASE</u>
Salaries	January/February
Enrollments	November/December
Tuition and Fees	March
Residence/Migration	Immediate
Degrees	April/May
Finance	January/February
Minorities	November/December
Financial Aid	January/February

Beyond this program, aimed clearly at the earliest possible release of data, we suggest further that every effort be made to arrange for the distribution of complete sets of forms submitted by individual institutions to other institutions expressing high interest in the interchange of such information. Perhaps this can best be accomplished by facilitating interaction between and

among similar institutional types, but there are obvious advantages to using common forms employing consistent definitions for purposes of information exchange.

Access to Data

Many state and institutional policy issues require early access to raw institutional data collected by HEGIS. Within the bounds of resources and legitimate requirements for confidentiality, individual investigations, institutions, agencies of government, and associations should be permitted access both to raw, unedited data and data that have been edited but not yet published. To improve this access, we urge NCES to move positively toward the maximum implementation of the Freedom of Information Act and the provisions of Section 417 of P. L. 91-230 authorizing the Commissioner to furnish information at cost or under cost-sharing projects with institutions, associations, or other agencies.

We believe that early access to raw HEGIS data should be expedited by permitting authorization at the level of the Branch Chief, under appropriate guidelines for protecting legitimate confidentiality and recognition of the proper interpretation of unedited data.

NCES should discourage excessive and unnecessary use of the confidentiality option of financial data.

Minorities

Although the principal charge of our work group did not include the discussion of new data to be added to HEGIS, there were two areas which showed such high priority of need that this work group recommends that these two areas be included in HEGIS. The elements of these data are discussed briefly below.

Without a doubt, minority data have true and immediate relevance to the post-secondary educational community. The data most relevant and of greatest import fall into two areas: (1) basic enrollment information on minorities by full-time, part-time, and sex; (2) financial aid information as it is distributed to these same groupings of minorities.

Basic enrollment information is needed to show the true picture of minority involvement in postsecondary education; in particular, the part-time student who represents as meaningful an ingredient in the uplift process of post-secondary education as the full-time student. Little needs to be said for the relevance of enrollment data by sex.

The second aspect of minority data which the task force expressed strong need for also relates to the issue of women in education. This aspect is the financial aid of these groups -- a new but critical concept. The distribution of financial aid to minority groups, as well as to men versus women, will be under examination as a measure of commitment to these groups. The particulars

of this financial aid data should also show federal, state, and local dollars including the numbers of recipients under these programs by minority group as well as sex. In addition, examination of that aid extended to the part-time student must be included in order that the commitment of this growing constituency of postsecondary education be recognized.

Residence and Migration Survey

With the financial straits now faced by most campuses, many institutions, particularly those funded by state and local governments, are taking a hard and often jaundiced view of their out-of-state students. At the same time, there has been a steady increase in tuition, in particular for out-of-state students.

These trends make it important to have very current data on what is happening as to student migration. Work Group C would, therefore, strongly urge that HEGIS VII (72-73) include the residence and migration of college students survey, rather than waiting until 73-74 as now planned, and that thereafter at least some limited information be gathered each year. Such data, at least a breakdown of in-state versus out-of-state students, should be early released in November/December along with enrollment information. More complete statistics should be published when possible.

Institutional policy toward foreign students has also been affected by budget stringencies. Often changes in admission or tuition policy aimed at out-of-state students, affects the foreign student. In addition, funds formerly used to support foreign students now are absorbed in minority student programs. We would urge, therefore, that the survey of residence and student migration include questions on foreign students, including information as to whether they are treated by the college as a separate category or as ordinary out-of-state students.

Dissemination

The data acquired in HEGIS need to be disseminated both quickly and widely. The early releases of unedited, preliminary data need to go to all institutions of the type included in the lists, plus those whose plans and activities are essentially and directly affected by the conditions described in the data (e.g., planners for community colleges need data on program majors and degrees in four year institutions). The dissemination may not be based solely on expressed demand, since demand is often based on awareness of utility and this derives from experience. States and institutions learn to utilize data by having them available.

It is recognized that the notion of "rapid release," the telephoned response to a telephoned request, needs to be severely restricted lest it divert staff and other resources from ongoing activity. On the other hand, such service must be available, and authority must be vested in selected data handlers to make a quick judgment that there will be an immediate positive response.

The conventional distribution of conventional publications must be widespread to institutions and states in multiple copies. The administrator or researcher who needs a figure quickly cannot wait for the publication to arrive from the Government Printing Office, nor can he canvass his colleagues to see if they have a publication that may or may not exist. The publication must be there, available, at the moment the need arises. If not, he will use whatever is available. Consistent and effective utilization of data derives from knowledge that those data are immediately available and from experience with previous uses. Further, the notion that members of the educational community should be forced to purchase from the federal government data that they have provided to the federal government is a bit like revenue sharing in reverse.

WORK GROUP D
ACCESS TO HIGHER EDUCATION AND EQUITY OF OPPORTUNITY:
WHAT DATA NEEDS COULD BE SUPPLIED BY HEGIS?

Areas of Concern

Accessibility of postsecondary education to potential clientele. Pool of potential students. Background data on students. Aspirations and attitudes of students. Institutional diversity. Needed trend and projection data.

Tasks

Recommend priorities, ranging from essential to advisable and considered but rejected, for action by the conferees regarding data needed for policy decisions with regard to accessibility of postsecondary education.

Recommend allocation of responsibility among data gatherers in this area.

Make specific recommendations regarding priorities in this area for inclusion in HEGIS VII or future HEGIS.

Members

Alexander Astin
Ernst Becker
Aikin Connor
Gary Cooley

Nancy Eklund
Lois Elliott
Ruth Oltman
Bill Thompson

Recommendations

Although in recent years postsecondary institutions have increased the diversity of their programs as well as extended opportunities for access, it seems clear that much has yet to be done in devising a variety of models or patterns of postsecondary education if we are to meet the diverse goals, aptitudes, and educational and vocational aspirations of all those who seek entry to postsecondary education. The question of access and equity therefore involves diverse groups, each with differing needs and differing information requirements. Adults, part-time students, drop-outs, stop-outs, G.I.'s, women, ethnic groups, the academically less able students, and the handicapped -- all have problems which are unique and which have imposed barriers or all have had barriers imposed upon them to limit their access to postsecondary education. We recognize that information relative to individual or personal barriers may best be elicited from surveys other than HEGIS, such as the NCES longitudinal study. Information relative to institutional barriers, on the other hand, may be gathered very effectively from HEGIS. Suggestions for HEGIS that would provide data to assist in reducing the institutional barriers are as follows:

1. Expand the survey to include all institutions of postsecondary education

An inventory of the existing opportunities in proprietary schools would be a valuable addition to the information we need if we are to better understand the total diversity and options that may be exercised in addressing problems of access and equity.

In collecting this type of information, however, the Office of Education should not become involved in the issue of accreditation. Therefore, we recommend that the survey of proprietary and other educational institutions should become an integral part of HEGIS. To differentiate proprietary institutions on a separate schedule would simply reinforce current discriminatory practices and imply that such institutions possess lower status and less worthy quality.

Since a compilation of these proprietary institutions may be difficult to obtain, the Veterans' Administration list may serve as a beginning base.

2. A schedule should be provided for ethnic and marginal student information

In order to provide relevant programs for all students, more information is required such as the number of academic and counseling programs for marginal students; the number of students enrolled in these programs; the race of all students; entrance test scores (or high school grade averages) of all students; and the number of degrees granted.

3. Include questions on programs

One method of facilitating access would be to encourage institutions to take greater advantage of currently existing acceleration programs and to adopt new and innovative programs. For example, greater use of advance placement, audit by examination, independent study, and three-year degree programs may free resources which could be directed toward meeting and expanding opportunities for the nontraditional student. We recommend, therefore, that a data schedule be provided to list the type and use of these options. This survey could provide a list of innovative programs that could be checked if applicable and allow open space to add their own programs. For each item checked or added, a request would also be made to provide information on when the program was instituted. If no programs were checked or added, ask if any are intended for the future. Also, the type of students enrolled would be beneficial.

4. Include a question that will provide information on the types and amounts of financial aid which are available to part-time, adult, and other nontraditional student groups.

5. Data schedules for special or nontraditional populations should reflect the same categorical breakdown as those used for traditional students.

6. A question could be provided on facilities for the handicapped

Accessibility to postsecondary institutions for the handicapped is highly dependent upon the facilities. Questions could be asked such as the type of facilities available (i.e., ramps, physical therapy centers, etc.); the number of handicapped students on the campus; and the planning horizon for construction of facilities for the handicapped.

7. Provide a question that will extract information concerning the existence of day-care centers and the sources of staff and financial support.

8. Include a breakdown by age

Since age has been a traditional barrier to access, data schedules for nontraditional students and perhaps the regular HEGIS schedules should reflect a breakdown by age.

- 9.* The new continuing education schedule should include data on sex of students.

* Added on the basis of comments received during the review process.

WORK GROUP D
SUPPLEMENTAL RECOMMENDATIONS
TO THE HIGHER EDUCATION SURVEYS BRANCH

1. Improvement of data processing
 - a. Establish file structures in such a fashion that the data are more easily accessible
 - b. Establish a master historical data file
 - c. Develop software for assessing and analyzing data
 - d. Increase the capacity to respond to requests for data that could be supplied either in the form of analysis or raw data for the user to analyze
2. Continuation of the longitudinal study to obtain information relative to individual barriers
 - a. Enlarge sample size by starting the study at the 10th grade level rather than the 12th grade
 - b. Prepare related cohorts to determine the increased effectiveness of programs as they continue over a period of time
 - c. Include a study of individual differences
 - d. Include a study of retention after college admission by student characteristics such as economic status, test scores, sex, age, etc.
 - e. Include a study of open access to postsecondary education, e.g., proximity
3. Assume responsibility for educating institutional representatives, particularly those from the small publics, on the availability of management tools to aid their internal management and facilitate reporting at the national and state level.
4. Select parts of the HEGIS survey that could be included every other year, rather than every year (e.g., finances and facilities). This would improve the timeliness of the data, cost less money, and relieve the institution of burdensome reporting requirements.
5. Subcontract dissemination responsibilities

WORK GROUP E
INSTRUCTIONAL MODES AND PRACTICES
(TRADITIONAL AND NONTRADITIONAL)

Areas of Concern

Delivery systems of education. Program innovations. Nontraditional approaches to postsecondary education. Special program offerings, instructional methods, external degrees. Coverage of postsecondary institutions and programs beyond the academic institutions not covered by HEGIS. Effectiveness of present traditional and nontraditional practices.

Tasks

Recommend priorities, ranging from essential to advisable and considered but rejected, for action by the conferees regarding data on instructional modes needed for policy decisions.

Recommend allocation of responsibility among data gatherers in this area.

Make specific recommendations regarding priorities in this area for inclusion in HEGIS VII or future HEGIS.

Members

James Byrnes
Earle Cook
Anne Ducey
Edith Huddleston

Donald Reichard
Anne Winchester
William Woolf

Recommendations

- I. Work Group E consisted of six bureaucrats, no one of them a specialist in "Instructional Modes and Practices," which was the topic we were charged with discussing. We were also less than well-informed about research or data collection efforts already under way in the area. The following recommendations should be read with appropriate caution. It should be a first step of NCES to collect the information already collected by various agencies (e.g., a study by Educational Testing Service, another by the Foundation for Nontraditional Study).
- II. The group's discussion led to the conclusion that an essential prerequisite to the study of instructional modes and practices is the development of a scheme for classifying learning experiences (traditional as well as nontraditional). Among the variables for which classification schemes (taxonomies) would need to be developed, the group mentioned the following:

- a. Educational objective (this could be an expansion of the current taxonomy of disciplines to include objectives such as literacy, trade skills, and many others in addition to the objectives of competence in recognized academic disciplines).
- b. Mode of instruction (sample types: lecture, laboratory, reading, TV, computer terminal, internship).
- c. Type of institution (an expansion of the classical public, private, two-year, four-year, Masters, Ph.D., classification to include proprietary, trade, military, etc.).
- d. Location of instruction (classroom, streets, library, aboard ship, home, etc.).
- e. Type of evaluation (pass, fail, no credit, by examination [GED, CLEP], etc.).
- f. Type of accreditation (degrees, certificates, diplomas, information processes, counting accumulated credits).

III. An urgent initial need is a catalogue (directory) of those institutions and organizations providing postsecondary educational opportunities which are not now covered by HEGIS. These constitute a very significant educational resource--policy decisions should not be made without knowledge of the scope of that resource.

IV. A number of intensive research studies should be undertaken, utilizing the classification scheme described in II (above), to provide information about issues such as the following:

- a. What methods of instruction are currently being utilized?
- b. How are they being evaluated and certified? (Included here should be efforts to study the procedure by which institutions accept or reject credits accumulated by various learning experiences.)
- c. Relative effectiveness of various learning experiences (especially modes of instruction) compared with relative costs.

V. The group was firmly of the opinion that the most urgent priority for NCES is to improve dramatically the timeliness of its publication date. If it came to a choice, we would have NCES do none of the work described above rather than continue or prolong the current publication lag. On the assumption that such a choice need not be made, we felt that NCES was the appropriate agency to collect the information necessary to compile the directory described in III above. The taxonomies described in II, and the studies outlined in IV should presumably be contracted to appropriate agencies.

WORK GROUP F
FINANCING HIGHER EDUCATION

Areas of Concern

Data needed on who pays and how. Sources of funding. "Economic indicators" for higher education, such as "net educational expense."

Tasks

Recommended priorities, ranging from essential to advisable and considered but rejected, for action by the conference regarding financial data needed for policy decisions. Recommend allocation of responsibility among data gatherers in this area. Make specific recommendations regarding priorities in this area for inclusion in HEGIS VII or future HEGIS.

Members

Thomas Auch
Harold Bell
Richard Holden
Hans Jenny

Alex Mood
Daniel Morrissey
William Rumsey
Jim Topping
Rose Wiener

Recommendations

Social values of any period are subject to radical change... These changes are the hardest of all to foresee. Making it difficult to predict the physical [translated here to "information"] systems these uncertain conditions will support. -- Ben H. Bagdikian, The Information Machine, 1971.

Work Group F seemed to agree on several broad assumptions, principles, and even prejudices. For instance, we believe in the efficacy -- in appropriate or proven areas -- of the pricing process in a free and competitive setting. This is not to say that other forms of resource allocation are not acceptable, but rather that in designing a resource support system, we continue to use multiple means among which substantial reliance on free market pricing is a feature.

We also considered the problem of planning educational activities by means of broad policy in contrast to directing centralized federal and state education systems in great detail. A case in point may be the manpower planning. Should educational planning be determined by short-term manpower requirements. We believe that at best the answer may be qualified no.

We also considered the question of control and power in relation to who collects data. For instance, our recommendations are based on the assumption that national postsecondary education statistics serve primarily a national policy purpose. While of use to other agencies, national statistics need not be designed to serve statewide planning and control purposes. Some members of the group favored collection of the national data at the state level, but we seemed to sense that there might be a difference between a "useful-to-the-state" data system and one serving the broader national purpose.

Specifically, we agreed with the following rank ordering as to who would use the data:

- a. National policy makers
- b. National and regional postsecondary educational associations
- c. Regional, state, and local postsecondary educational planning boards and legislators
- d. Individuals, researchers, etc.
- e. Institutions (some but not all of them)

We centered our attention on (a).

Questions and Priorities

1. Is HEGIS VII attuned to the postsecondary education universe and needs?

ANSWER: No

REQUIRED: Prompt expansion to include postsecondary education segments not now included or inadequately (and inappropriately) covered.

SOME COMMENTS WERE: Entire segments excluded; financial statistics sketchy; data in places unnecessarily detailed; data not always suited to answer policy questions at national level; data not useful and dangerous in interinstitutional comparisons; income and expenditure categories inappropriate for community colleges and other postsecondary institutions outside the conventional higher education matrix; neglect of vocational education.

2. Who pays and how?

ANSWER: In a narrow sense, income is identified by source although source and purpose are mixed together. In the broader sense of "do those who pay have a proven ability to pay?" (student, taxpayers, donors, foundations, etc.), the answer is no.

SOME COMMENTS WERE: Should there be a closer link with personal income data, confidential student need information, available public and private resources to enable policy makers at the national level to decide in favor of financing scheme A over scheme B? There seemed to be a consensus that HEGIS VII would be of minor use in this sense.

3. What kind of information for national policy determination?

ANSWER: Broad information. Some of it based on sampling; higher priority item.

National policy formulation requires timely information on trends and shifts in the costs and structure in postsecondary education.

Grouping by more appropriate criteria seems desirable. NCES should explore in depth the feasibility of sampling approach to the development of new data on major indicators of educational change. Currently available comprehensive data make it possible to test the validity of different sample frames designed to provide data on a state, regional, and national basis. Sample data could be collected and analyzed annually and adjusted to benchmark comprehensive data collected every five years. This could release funds for detailed analyses of comprehensive data to reveal both gaps and more effective uses of data.

4. Should NCES collect all pertinent data now in HEGIS VII?

ANSWER: No. Eliminate some detail altogether.

EXAMPLES: Detailed listing of administrative staff: leave administrative salary reports to the National Association of College and University Business Officers. Detailed listing of faculty: leave this to the American Association of University Professors. Detail of degree programs cumbersomely detailed.

5. Should some financial data be changed?

ANSWER: Yes

Part A: Restrict table to current operating income.

Part B: Restrict table to current operating expenditures.

Part C. Create a new table identifying capital spending, capital income.

Part D. Show a consolidated debt statement including interest expense, rates, etc.; distinguish debt originating in operation from that originating in plant account.

6. What other financial or cost indicators should NCES develop?

ANSWER: A. Some sample cost indicators by academic disciplines, program classifications, etc.

B. Some data partially analyzed by institutions, such as key ratios, categories of class size, personnel-to-student ratios in administrative areas, support personnel, etc.

C. More detail of the student aid income and expenditure structure over time.

D. A new definition of library costs as libraries become or are multimedia learning centers.

COMMENT: There seemed to be a consensus that HEGIS VII provides a lot of figures with little analytical content. The lack of time series is especially conspicuous and cost-indexes are virtually nonexistent.

NCHEMS development appears promising in filling a partial gap.

WORK GROUP G
EFFECTIVENESS OF POSTSECONDARY EDUCATION IN SERVING PERSONAL
AND SOCIAL NEEDS, INCLUDING MANPOWER REQUIREMENTS

Areas of Concern

Data needed for educational planning in terms of manpower requirements.

Tasks

Recommend priorities, ranging from essential to advisable and considered but rejected, for action by the conferees regarding data needed for policy decisions on occupational training.

Recommend allocation of responsibility among data gatherers in this area.

Make specific recommendations regarding priorities in this area for inclusion in HEGIS VII or future HEGIS.

Members

Charles Allmand
Marjorie Chandler
J. B. Lon Hefferlin
Boyd Ladd

Justin Lewis
Wayne Tolliver
Robert Wright

Recommendations

1. Postsecondary education programs other than academic higher education must be included in the U. S. Office of Education data collection in a compatible manner so that the meeting of personal and social needs can be more comprehensively assessed. Many social needs and personal competencies can be met through industrial and commercial programs or less formal institutions, and these programs must be surveyed comparably with present institutions covered by HEGIS (in appropriate level of detail).
2. The U. S. Office of Education must become the principal center of knowledge about the availability of data and analytic studies regarding postsecondary education from both governmental and non-governmental sources, possibly through a "data availability service" that is able to respond to inquiries on the location of existing data. (The American Council's "Report on Questionnaires" assists in this effort, as does ERIC, but additional effort should be made by the National Center for Educational Statistics to keep on top of all data collection as a coordinating and referral agency.)
3. The National Center for Educational Statistics must gather more data from individual students, particularly on their educational experiences. The planned longitudinal study of high school seniors

deserves major support to assure that its sample size is large enough to permit comparisons by type of institution attended, data on student reactions to their programs, and possibly an assessment of their knowledge, attitudes, and values. Cohort passage data from secondary to postsecondary education and to employment-- "transitional indices"--are urgently required. It is important that the NCES longitudinal project continue to be coordinated with other longitudinal efforts (notably that of ACE), and that "cross-roads" permitting joint use for analysis be designed wherever possible.

4. The expertise of the staff of the U. S. Office of Education (Office of Program Planning and Evaluation as well as NCES) should be used in developing a "casebook" of research models for institutions to use in evaluating their own programs and for other federal agencies to consider in evaluating institutions.
5. Additional data desirable to be gathered by HEGIS include post-doctoral persons, cooperative arrangements with other educational institutions and other agencies, and information on obstacles to interstate mobility (such as restrictive quotas, out-of-state tuition, etc.)
6. Some federal mechanism, free from political influence, should assemble and disseminate data to policy makers in higher education to alert them to new societal needs. Qualitative and quantitative data should be provided which deal with current and projected changes in society and with manpower demands.
7. HEGIS forms can be revised without great cost to improve their reception and completion: (1) "Write-ins" can be encouraged on unique majors within the subject field taxonomy; (2) each schedule could contain comment space for reactions to any "lack of fit" between categories of data as requested and institutional reality; (3) respondents could be asked to list any questions or data items they find useful in future versions--thus enabling all respondents to contribute ideas as have the members of HEGIS conferences; (4) the general purpose of the schedules should be stated (probably in a headnote) to explain their utility.
8. Priority should be given to more extensive analysis of collected data, relative to further collection of data. Trends on particular topics should be studied, even to the extent that the distribution and collection of forms be contracted out, permitting the Higher Education Survey Branch staff to undertake analyses they are most qualified to do but are unable to do because of survey operations responsibilities.

9. Consideration should be given to the publication of campus profiles containing HEGIS data from several schedules on each institution, beyond the institutional characteristics data now published in the Directory. In HEGIS publications, caveats pointing out limitations on the legitimate uses of certain data should be included in Technical Notes. Also, NCES might consider inclusions in the Digest and other NCES publications citations to alternative estimates or related data collected by others.
10. Specific observations: Monthly rates on the salary schedules, avoiding need for two separate schedules, would be adequate for many purposes; facilities as utilized (including joint utilization); employees by occupation (rather than by department or assignment); mobility data at increased frequency; data on new clientele, i.e., characteristics of new students, would be useful to reveal socio-economic groups being served by postsecondary education. It would be desirable for Vocational Education postsecondary data to be collected in terms of the HEGIS taxonomy; measures of "program health" are needed.

WORK GROUP H-I
PRIORITIES OF THE STATE AND FEDERAL GOVERNMENTS FOR
DATA FROM POSTSECONDARY EDUCATION

Area of Concern

Data needed by the state and federal governments for policy decisions regarding postsecondary education.

Tasks

Rank priorities for statistical information from postsecondary education, ranging from essential to advisable and considered by rejected, in terms of federal needs.

Make specific recommendations regarding HEGIS VII and future HEGIS based on these priorities.

Members

Sheila Drews
William Fuller
Ted Gilbert
Paul Mertins

Floyd Stearns
Thomas Truitt
Eugene Tucker

Recommendations

1. HEGIS surveys should be expanded to include postsecondary education institutions in addition to accredited institutions of higher education. Nonaccredited postsecondary institutions initially should be expected to respond only to 2300-1, Institutional Characteristics of Colleges and Universities; a revised 2300-2.3-1, Opening Fall Enrollments, designed to collect enrollment data from these institutions; and the new survey designed to collect program data.
2. Timely reports summarizing the various survey areas should be published annually.
3. A new survey should be added to collect program data in a format which will allow integration with enrollment, facilities, faculty, and financial data.
4. Priorities for existing survey areas should be as follows:
 - a. 2300-2.3-1, Opening Fall Enrollment. The instrument should be examined to include full-time enrollment data and civil rights compliance data.

- b. 2300-3, Employees in Institutions of Higher Education.
 - c. 2300-4, Financial Statistics of Institutions of Higher Education.
This survey should be carefully examined to determine if all data are really necessary.
 - d. 2300-7, Inventory of College and University Physical Facilities.
 - e. 2300-2.1, Degrees and Other Formal Awards Conferred.
 - f. 2300-2.5, Students Enrolled for Advanced Degrees.
 - g. 2300-1, Institutional Characteristics of Colleges and Universities.
- 5. A special survey, not part of the basic HEGIS, should be conducted to determine numbers and distribution of needy students.
 - 6. A special survey, not part of the basic HEGIS, should be made to determine the financial health of institutions.
 - 7. 2300-5, College and University Libraries should be considered a special study to be conducted periodically.
 - 8. 2300-8, Adult/Continuing Education Activities in Institutions of Higher Education should be a special study conducted on a periodic schedule.

WORK GROUP J
PRIORITIES OF INSTITUTIONS FOR COMPARATIVE
DATA WITHIN POSTSECONDARY EDUCATION

Areas of Concern

Data needed by institutions on a comparative basis for policy decisions.

Tasks

Rank priorities for cross-institutional statistical information, ranging from essential to advisable and considered but rejected, in terms of institutional needs.

Make specific recommendations regarding HEGIS VII and future HEGIS based on these priorities.

Members

John Creager
Edith Huddleston
Eldridge Scales
Joseph Semrow

Donovan Smith
Stanley Smith
James Thomas
George Wade

Recommendations

Priorities of useful data in HEGIS forms

A. High priority

1. Institutional characteristics
2. Student data -- all categories are useful but should be organized by peer groupings of institutions.
3. Student flow data -- samples should be taken at transition points along the educational track -- particularly at Associate and Baccalaureate degrees
4. Library data on a biennial basis

B. Middle Priority

1. Employee data -- useful only as unionization of faculties increases
2. Facilities -- definitions and categories have been useful; other information less useful now

C. Low priority

1. Financial data -- in present form not useful to institution;
should be provided by institutional discipline
and level of discipline offering if at all
2. Adult education activities -- not useful at present, but will
be as social forces have an impact
on the individuals' use of time

D. Items considered but rejected

1. Projections in present form are not useful and may be misleading.

SECTION D

SUMMARY OF CONFERENCE RECOMMENDATIONS REGARDING HEGIS

SUMMARY OF CONFERENCE RECOMMENDATIONS REGARDING HEGIS

From the written reports of the work groups and from the oral reports of activities of these work groups, eight items of general importance for the future of HEGIS were identified. These items are:

1. The need for timely publication of HEGIS data.
2. The need for additional information concerning students.
3. The need to survey institutions of postsecondary education rather than just institutions of higher education.
4. The need to define the role of state agencies in the collection of information from institutions.
5. The need for more extensive data analysis (by NCES) for purposes of both determining which information should be collected and applying the data to the solution of problems after collection.
6. The need to convince institutions to remove confidentiality restrictions from data submitted.
7. The need for obtaining information to support decisions regarding modes of instruction.
8. The need to coordinate the data collection efforts of state and federal agencies and certain professional associations.

While there seemed to be general agreement on these points of major concern, there was not, however, similar unanimity of opinion on stated courses of action. In the following pages each of these eight items will be discussed separately. Included will be discussions of the various courses of action recommended by the work groups, comments added as dissenting opinions, of caveats, and of alternatives by participants in the Wednesday general session. Where appropriate, some conclusions are drawn from the various comments and presented for consideration.

The majority of the comments received as a result of the review process pertains to this section of the report. Some of the comments served to clarify or correct statements made in the preliminary version of the report. In such cases, the comments have been incorporated in this section at the appropriate places. Most of the comments, however, expressed opinions on one side or another of an issue discussed at the conference or provided additional thoughts on these issues. These comments represent a significant input but cannot be considered as part of the proceedings of the conference. As a result they have been included in Appendix C.

*The order of this listing is not intended to reflect priority ranking.

1. The Need for Timely Publication of HEGIS Data

The conference participants generally agreed that, for purposes of institutional decision making, HEGIS data have a relatively short useful life. When data are not available when most needed, their value lies only in their use in the development of historical perspectives, a use more important at the state and national levels. For such a purpose a relatively greater lag time is generally acceptable.

Given the high priority for timeliness of data publication, a great deal of attention was given to consideration of methods for achievement of this objective. Three factors were identified as having particular influence on timeliness. First, the quantity of data collected can be controlled and differential priorities between and within the various data categories can be set on the basis of relative information used so that primary efforts can be devoted to timely publication of the most important data. Second, the quality (or accuracy) of the data can affect timeliness since the greater the accuracy required, the longer the editing cycle. Third, the mechanism for collecting these data can affect timeliness since such devices as decentralization can potentially affect the speed with which data can be collected, edited, and published. All three of these considerations were dealt with at length by the conference participants. The following is an attempt to synthesize the outcomes of those discussions.

A. Regulating Quantities of Data Through Establishment of Priorities

One of the ways of regulating quantities of data is through establishment of priorities for the collection of data. During the course of the conference, four explicit expressions of priorities for information were provided by the conference participants. These were as follows:

- 1) Work Group C (see page 43), which dealt with analysis and accessibility of federal data, developed a list of priorities on the basis of when the data are most needed for use in institutional decision making rather than on the basis of what data are most needed. It should be noted that this list was intended to indicate when emphasis should be given particular types of data. This list should not be construed as indicating what data have the highest priority.
- 2) Work Group H-I (see page 61) suggested priorities (by type of information required) from the point of view of state and federal governments.
- 3) Work Group J (see page 63) suggested priorities (again by type of information required) from the institutional point of view.
- 4) Finally, the individuals who participated in the Thursday session (see list in Appendix A) arrived at three sets of priorities based on:

- a) Importance of including forms in HEGIS VII
- b) Importance of early release
- c) Importance for development of final reports

These priorities are given in Section E of this report.

From these various priority listings it is possible to point out those areas in which there is some measure of agreement as well as those areas in which lack of agreement is noteworthy. As generalizations it can be stated that:

- 1) Institutional Characteristics data have highest priority because of their use as a file control by NCES and because of their usefulness to institutional users.
- 2) Opening Fall Enrollment and Minority Student Enrollment data have high priority in the eyes of all users.
- 3) Economic background data and financial aid data for students (with some way to integrate them) were indicated as being of high priority by institutional representatives and were recommended as the subject of a special study by state and federal government representatives. It can be concluded that these types of data have relatively high priority from all sectors.
- 4) Residence/Migration data, where ranked, were given a "high to medium" rating.
- 5) There are considerable differences of opinion with regard to priorities associated with financial, facilities, and employee data. Representatives of state agencies rank these as high priority. Institutional representatives relegate them to lower priorities.
- 6) Data regarding degrees awarded were given a lower priority on the basis of usefulness, although, for reasons of continuity and because of their minimum disruption to data providers and because they represent the only indicator of outputs, it was recommended that they be continued.

No further conclusions regarding priorities of data collection are warranted on the basis of the suggestions made by the conference participants.

3. Regulating Quantities of Data Through Use of Sampling Techniques.

The second approach suggested the investigation of the feasibility of using sampling techniques to obtain data from a subpopulation of the

institutions of higher education from which estimates of totals for the entire population could be imputed. While the use of sampling techniques was seen as promising, it was felt that a number of problems needed to be explored concerning the practical application of sampling for early publication. Rather it was recommended "that NCES undertake a sampling study within the total 1971 HEGIS universe to provide early release of key data elements." Future sampling activities should be based on careful analysis of the experience in this pilot year.*

C. Regulate Quantities of Data by Selecting a Basic Core of Required Data and Obtaining These Data Prior to Collection of Detailed Back-Up Information.

This procedure would require institutions to submit a minimum set of data from a variety of the HEGIS schedules at a relatively early date (e. g., sometime in September or October). These data would be recognized for what they are, i. e., early estimates of data which would later be augmented and refined, would be processed by NCES with a minimum of editing, and published in November or December. The primary benefit of such a procedure is that a basic set of information from all of the various schedules could be obtained early instead of very detailed information about only one or two things. On the last day of the conference, Dennis Jones was asked to prepare a list of elements which might be included in this basic core of information. The following elements are included on that list. These elements generally reflect extracts from current schedules. A list developed by Bill Fuller and included in Appendix C is potentially much more useful, but deviates much further from current practice and could not be as rapidly applied.

I) TOTAL DEGREES GRANTED (PRIOR YEAR)

<u>Number of Certificates (2 years)</u>	<u>Men</u>	<u>Women</u>
Associate Degrees	X	X
Bachelor's Degrees	X	X
Master's Degrees	X	X
Doctor's Degrees	X	X
First Prof. Degrees (by field)	X	X

Summarized from 2300-2.1 which is due August 15 -- does not require separate reporting.

II) OPENING FALL ENROLLMENTS (FTE)

- A) Two-Year Programs, 4-5 Year Programs, Graduate Programs
- B) In-State, Out-State
- C) Men, Women
- D) Ethnic Groups (when this item is added to the general HEGIS Report)

*Recommendation of Work Group B

III) EMPLOYEES (FTE)

	<u>Men</u>	<u>Women</u>
Faculty	X	X
Other Professional	X	X
Nonprofessional	X	X

IV) REVENUES

Tuition and Fees	
Federal Government	
State and Local Government	
Endowment	
Gifts	
Sponsored Research) Include Indirect Costs Recovery
Other Sponsored Programs	
Major Service Programs	
Auxiliary Enterprises	

V) EXPENDITURES

Educational and General
Student Aid
Major Service Programs
Auxiliary Enterprises

Principal of Borrowings -

Total amount of funds borrowed during fiscal year or net increase (decrease) in total indebtedness during fiscal year.

VI) FACILITIES

Total Gross Square Feet NASF Devotes to
Industry and Research
Library NASF
Administration NASF
Auxiliary Services NASF
All Other NASF

D. Changing the Quality or Accuracy of the Data

The participants agreed that timeliness was generally more important than accuracy and indicated an ability to make use of unedited data if they could be acquired in a timely fashion. One of the suggested ways for obtaining timely information was to specify an early release publication date, publish all of the data received by that date in

unedited form, and then publish the edited data at a later date as they became available. It was further recommended that, if the publication date were missed, efforts with regard to that particular type of data be dropped and attention be focused on those data having the next more critical publication date. Such action, it was felt, would promote increased observance of the established due dates. Further, it was felt that if timeliness were assured through use of unedited data, the institutions would police themselves and would take care to provide more accurate data.

E. Use of State Agencies as a Mechanism for Decentralizing Data Collection.

It was suggested that by decentralizing the data collection mechanism to the state level guidelines could be promoted in two ways. First, decentralization would put collection of data "closer to home." This could provide a mechanism for closer contact between data collectors and institutions and therefore, hopefully, better responsiveness. Second, since data editing could be decentralized, NCES would receive only edited data, thereby cutting down time delays. It was also suggested that such an arrangement would do nothing but add another level of bureaucracy, thereby delaying things further rather than speeding them up. This point of view was given some credence by Ted Drews' statement that the experiment with facilities data indicated that while NCES was getting better data through use of decentralized procedures, the time frame was extended as a result. This suggestion is discussed further under point 4 below.

2. The Need for Additional Information Concerning Students

The consensus of the conference participants was that collection of additional information about students in the Higher Education General Information Survey was a matter of highest priority. In particular, the following data were suggested as being most important.

- a. Data on ethnic background. It was recommended that the ethnic background data currently collected by the Office of Civil Rights be replaced by inclusion of a request for similar information in the HEGIS framework.
- b. Economic background and financial aid information concerning students. It was felt that ethnic background data are of limited use unless they can be associated with economic background information. It was also felt that data on the distribution of financial aid funds to students of different social and economic backgrounds are extremely important.
- c. Residence/migration studies. Since a study of migration patterns must be nationwide in scope, neither institutions nor state agencies can obtain such information except within the structure of a national survey such as HEGIS. This is

in direct contrast to most other types of student data which could be collected at the state or institutional level if necessary. As a result, many of the conference participants felt strongly that NCES not wait until 1974-75 to collect additional migration data. The importance of such data is emphasized by the need at the state level to review and analyze tuition and enrollment levels for out-of-state students. Further, policy decisions regarding reciprocity programs on quota systems for out-of-state students are dependent upon such information.

3. The Need to Survey All Institutions of Postsecondary Education Rather Than Just Institutions of Higher Education

The conference participants were almost unanimously in agreement that NCES should survey all institutions of postsecondary education rather than just institutions of higher education. The conferees did not suggest to NCES specific means for implementing this recommendation on the assumption that structural and procedural arrangements among the several branches of the Center are a matter of internal resolution, but general consensus was apparent that the work of the Higher Education Surveys Branch and the Adult and Vocational Education Surveys Branch should, at the least, be increasingly coordinated. It was also recommended that a directory or compilation of organizations providing postsecondary education outside the normal higher education institutional framework be developed as the first step in the attempt to obtain information about this important segment of education.

4. The Need to Define the Role of State Agencies in the Collection of Information

The recommendations from Work Group A were quite specific and strong in favor of delegating the responsibility for administration, collection, and validation of HEGIS information to legally designated state agencies. This recommendation was based on three considerations. First, as the primary funder of higher education, the states also have the primary responsibility for planning in higher education and HEGIS provides a basic set of information for this purpose. Secondly, this recommendation was based on the assumption that data collection could be done more rapidly and more accurately by an agency which is "closer to home."

Finally, it was felt that the total amount of data requested from the institutions could be reduced if state and federal requirements were coordinated at the state level.

Several representatives from private institutions objected strongly to this recommendation, stating that in reality they were more closely tied

to the federal government than to state agencies and that to make state agencies responsible would do little but add another layer of bureaucracy to the system. It was also noted that capability at the state level varied widely from state to state and that such an arrangement would be impractical in those states in which no state agency had either the responsibility or the capacity for this kind of undertaking. At best, the outcomes of the discussion indicated that arrangements by which HEGIS data were collected at the state level should be left to voluntary cooperation rather than made mandatory, at least until such time as funds were provided to state agencies to improve planning and to aid institutions in the development of data systems which can serve these ends.

5. The Need for More Extensive Data Analysis by NCES

The conference participants agreed that there is a need for more extensive data analysis in two respects. First, it is necessary to determine more adequately the data needed and the uses to which they may be put prior to their collection. In other words, it is necessary to have a better understanding of the ways in which the data are going to be used in a decision-making process at various levels. It was suggested that future conferences deal specifically with decision making at the state, national, and institutional levels respectively and that they serve to perform some of this analytical role. Secondly, it was stated that there is a need for much greater analysis of the data after they are collected. To justify collection, the data must be analyzed, interpreted, and applied in the decision-making processes of institutions and agencies. Analysis, particularly at the federal level, has historically been very limited.

6. The Need to Convince Institutions to Remove Confidentiality Restrictions From Data Submitted

It was noted that federal law requires the National Center for Educational Statistics to ask providers of information whether or not the information is to be kept confidential. At the present time, less than ten per cent of the institutions request that their data be kept confidential, but many of these institutions are those with extremely large enrollments. The end result is a situation in which the dissemination of a significant portion of HEGIS data is in some way restricted. It was the feeling of most of the conference participants that such restrictions were more a natural outgrowth of the fact that institutions were questioned about data confidentiality than of any particular fear of data misuse. Since the overall utility of HEGIS data is diminished as a result of confidentiality requirements, the sponsors of the conference indicated that they would use their influence to recommend to institutions that they not require NCES to maintain confidentiality of data.

7. The Need for Obtaining Information to Support Decisions Regarding Modes of Instruction

It was the consensus of conference participants that a great deal more information regarding how and where different types of instruction were being employed would be extremely beneficial. However, it was felt that this data is not appropriate for inclusion in HEGIS. Rather, such information should be gathered through the use of special surveys designed and conducted specifically for the purpose. This is particularly true since such information has applications which are much more in the realm of research than in the realm of decision making in an operational sense. Specific recommendations are included in the report of Work Group E. While it was agreed that HEGIS could not gather all the data required for such studies, it was noted that it could serve a very useful purpose in gathering those descriptive data such as what modes of instruction are being used (and where) which would provide a very necessary base to more detailed studies.

NOTE: Mrs. Gilford indicated that she would consider NCES sponsorship of a limited number of such special research projects in the coming year.

8. The Need to Coordinate Data Collection Efforts

The conference participants indicated that they would be overwhelmingly in favor of any arrangement whereby the number of requests made of institutions for data could be reduced. There were several specific recommendations made by conference participants with regard to this matter. Members of Work Group A recommended that NCES be urged to continue development of a single, comprehensive data structure which would be adequate to support planning at the institutional, state, and national levels. Although various state and federal agencies might require information in only selected areas or at different levels of detail, there is considerable need to promote the development and use of a single structure within which data of various levels of detail could be provided. While it is recognized that it is highly unlikely that the information required by all the government agencies can be collected within one set of survey documents, it was deemed reasonable to ask that government agencies be required to work within the same data structure so that institutional response can be simplified. Part of the rationale for the groups recommendation for decentralization of data collection to the state level was based on the assumption that such action could help to focus multiple requests for data somewhere other than the institution.

It was also recommended that control of survey documents within the federal government be improved through whatever mechanism is most appropriate. At the present time there are at least three different groups

having some interest in this matter: first, the Federal Interagency Committee on Education; second, a special task force recently established by Secretary Richardson; and third, the Office of Statistical Policy within the Office of Management and Budget. The latter office is the one with the most authority to control the proliferation of questionnaires and survey documents. The current procedures of the Office of Statistical Policy call for circulation of survey documents to interested agencies within the federal government. For example, HEGIS is circulated to NIH, NSF, and other agencies for review and comment prior to approval by OMB. It has been suggested that this review process could be much more effective if proposed survey documents were also circulated to data suppliers in order to obtain an indication of areas of duplication and proliferation. This suggestion was based on the feeling that institutions which had to provide the information would be much more concerned with the imposition represented by multiple requests for similar data than would be the various agencies who have only their particular objectives in mind.

The above summarizes the eight major areas of concern identified as a result of the conference and indicates some of the major considerations associated with each.

A ninth area of concern was identified also.

9. The Need for an Annual Conference

It was the consensus of the conference participants that HEGIS conferences which go beyond the details of the survey instruments themselves and consider long-range issues regarding the utility and structure of HEGIS should be held annually.

With these general agreements as a background, a limited number of conference participants attempted to develop specific recommendations for HEGIS VII. These recommendations are included in the following section.

SECTION E

RECOMMENDATIONS FOR HEGIS VII

RECOMMENDATIONS FOR HEGIS VII

Subsequent to the conclusion of that portion of the HEGIS conference in which primary emphasis was placed on discussing the major issues to be faced by higher education and on the development of general guidelines for HEGIS, a smaller group of conference participants met to discuss the specifics of HEGIS VII. This small group focused its attention on two matters; the relative priorities of the various HEGIS schedules and the technical details of selected schedules. These two topics are discussed separately below.

1. Priorities for HEGIS VII

The issue of priorities attached to the schedules of HEGIS VII were approached from three different points of view (priorities for inclusion in HEGIS VII, priorities for early release, priorities for fiscal reports). The resulting priorities are summarized in Table A.

The following considerations were included in the development of the priorities for inclusion in HEGIS VII:

- a. The priorities were established after it had been determined that for scheduling reasons internal to NCES there would be no library schedules nor adult continuing education schedules in HEGIS VII. Further, the participants recommended that no facilities data be collected in HEGIS VII.

This latter recommendation reflected the fact that four years of historical facilities data in a standardized format were available and that this format was being revised as a result of a revision in the Facilities Manual being prepared by NCHEMS at WICHE.

- b. The institutional characteristics schedule was given top priority for three reasons. First, the data included in this schedule provide a file control mechanism for the processing of all other HEGIS reports (that is, data on this schedule are combined with that on all other schedules in the development of the HEGIS publications). Secondly, this schedule is due for submission to NCES in July and therefore does not conflict in time requirements on other schedules. And finally, the information from this schedule is compiled in the Education Directory which is being published in a timely fashion and has proved to be an extremely useful document.
- c. Priorities attached to opening fall enrollments, ethnic background, economic background, and residence/migration

data reflect the general concern of the conference participants for the need for those student data of particular relevance to decision making at the institutional, state, and national levels. The relatively high priority attached to degrees awarded was in recognition of the fact that it represented the only output measure of higher education currently available as well as a recognition of the fact that such data were normally collected by institutions and did not create a hardship when requested. In addition, these data are scheduled for submission earlier than most other data and as a result do not conflict timewise with other schedules.

Similar considerations were attached to determining the priority for enrollments for advanced degrees. The schedule has been repeated several times. Institutions are geared up to do it, and since it does have usefulness to NSF and other government agencies, the benefits yielded are not out of line with the effort required to complete it.

The lower priorities attached to the finance and employee schedules were a reflection of two primary considerations. First, there are currently under way at the National Center for Higher Education Management Systems at WICHE projects which will result in revised data definitions and reporting formats for these types of data. Secondly, the conference participants indicated that they saw very little usefulness for this type of data. (NOTE: In all fairness it should be indicated that those conference participants who participated in establishing the priorities indicated above did not include a large complement of individuals whose expertise lay in the fields of either finance or personnel. Most of the individuals were much more concerned in their everyday operations with student data. It should also be noted that most of the individuals who participated in establishing these priorities were representatives of institutions and not state agencies. The report from the work group dealing with state and federal information requirements, Work Group H-I, indicated a much higher priority for financial and personnel data.)

The second set of priorities was established to reflect the relative need for early release of particular types of data. The group was asked for that information which would be most useful if it could be released in time to be plugged into the institutional decision-making process. The high priority schedules and their associated early release dates are as follows:*

*This list represents an indication of when data are needed rather than a priority listing based on dates.

1. Opening fall enrollments	November-December
2. Ethnic backgrounds	November-December
3. Economic background	January-February
4. Financial information	January-February
5. Residence/migration data	January-February

In addition, it was strongly urged that a firm schedule for early release be established and publicized to the data providers.

The priorities for final reports indicated in Table A reflect the reality of the need for institutional characteristics data as the control for other schedules, the relatively high priority for student data, and the relatively lower requirements for financial and employee data. It should also be noted that these priorities were established on the assumption that NCES would be able to achieve its goal of publishing all data by June 30 of the year in which they were collected.

Subsequent to the discussion of priorities of data and requirements for timeliness, it was again suggested that the real need was for a limited amount of information from each schedule submitted to NCES at the earliest possible date and compiled for early release. One possible list of this basic set of data was presented in the previous section of this report.

2. Technical Details on Specific HEGIS Schedules

Prior to discussion of specific changes to individual HEGIS schedules, some of the considerations which would influence specific changes were discussed. First, it was noted that the National Center for Higher Education Management Systems at WICHE currently has contracts with the National Center for Educational Statistics for work which directly affects three schedules in the HEGIS package, specifically, finance, facilities, and personnel schedules. In addition, it was suggested that significant change be restricted to only one area in any particular year. A combination of these considerations led the conference participants to agree that no major changes in HEGIS VII would be made in those schedules dealing with personnel and finances. (These considerations also contributed to the decision to eliminate the facilities schedule from HEGIS VII.)

On the bases of these factors and the emphasis placed on the requirements for student data throughout the conference, the overall guidelines for the development of HEGIS VII could be summarized as follows:

- a. Major changes should be restricted to those schedules dealing with students, with emphasis in this area being given to collection of ethnic and economic background data and data regarding student financial aid.
- b. Few, if any, changes should be made in the finance schedule.
- c. Few, if any, changes should be made in those areas of the employees' schedule which will be affected by a project currently underway at WICHE.

The specific recommendations about individual schedules are summarized below.

- a. Financial information. A major recommendation was that Part F, Basic Student Charges, be removed from the financial statistics form and incorporated into the institutional characteristics form. This recommendation was based partly on time considerations, since basic student charges are determined prior to the academic year and the information can be submitted at the same time as institutional characteristics information without difficulty. The decision was also based on the recognition that this information was basically a descriptor of the institution rather than an integral part of other financial data. Minor recommendations concerning basic student charges included dropping the distinction in room and board rates by sex and attempting to simplify the reporting of tuition charges by eliminating one of the breakdowns particularly pertinent to two-year institutions (currently tuition information is required for in-district students, in-state but not in-district students, and out-of-state students). No conclusion was reached with regard to the latter item. Instead, it was suggested that Paul Mertins contact either AAJC or some other spokesmen for two-year institutions to determine the necessity of this detail.

With regard to the rest of the form, it is recommended that no changes be made except those required from a technical standpoint to better integrate the data included as a result of incorporation of data elements previously gathered by the Bureau of the Census into the HEGIS form.

- b. Employee data. Discussions of the employee statistics form was severely hampered by the fact that there were an insufficient number of individuals present who had had experience in either providing or using HEGIS personnel data. As a result the recommendations made were of a general nature and did not deal with specific details within the forms. These recommendations were:
 - 1) That data items which will be affected by the Personnel Classification Manual Project at NCHEMS not be included in HEGIS VII. Rather such data items should be omitted until after publication of the manual, which is being written as the product of that project.
 - 2) That the list of positions in the survey of salaries of selected administrators should be replaced by the list being developed in conjunction with the Personnel Classification Manual Project. This list represents a combination

of the CUPA survey list and the list historically included in the HEGIS survey document.

- 3) That the survey documents dealing with salaries of faculty could be improved by requesting information on monthly or annual rates of pay rather than by asking for contract amounts based on contracts of varying terms (i.e., 9-10 months, 11-12 months, and other).
- 4) In order to obtain reasonable feedback, it was suggested that the question of personnel data to be included in HEGIS VII should be placed on the agenda of the National Review meeting of the Personnel Classification Manual Project at WICHE. This meeting was held July 20-22 in Boulder. A report of the discussions relative to HEGIS VII are included as Appendix B to this report.

C. Student Data. While the consensus of the conference participants was that it is important to collect additional student information on both ethnic and economic backgrounds, there is insufficient time available to adequately cope with the specifics of data collection. The primary recommendation was that the ethnic background data now furnished to the Office of Civil Rights should be combined with the enrollment data collected in HEGIS. The exact nature of this revised survey must be determined as a result of coordination between NCES and the Office of Civil Rights. While it was indicated that ethnic background data, in the absence of economic background data, have limited usefulness, the conference participants did not address the specific question of the types of data most useful and most capable of being supported by institutional data systems. The NCES staff was asked to explore this matter further.

The conference participants did not recommend changes in the survey documents regarding degrees awarded and students enrolled for advanced degrees.

APPENDIX A

LIST OF CONFERENCE PARTICIPANTS

HEGIS VII CONFERENCE PARTICIPANTS

- Alexander, Madelyn D., Director of Institutional Research, University of Maine, 107 Maine Avenue, Bangor, Maine 04401
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APPENDIX B

LIST OF PLANNING COMMISSION
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HEGIS VII CONFERENCE

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APPENDIX C

SUMMARY OF COMMENTS ON THE PRELIMINARY DRAFT OF THE CONFERENCE REPORT

SUMMARY OF COMMENTS ON THE PRELIMINARY DRAFT OF THE CONFERENCE REPORT

The majority of the comments received from the conference participants who reviewed the preliminary draft of the conference report pertained to Sections D and E of the report. The balance of the comments were more general and concerned such things as the lack of representation afforded particular groups, etc. In this appendix both types of comments received are summarized. The appendix is organized in the same way as Section D and E for ease of cross-reference. The general comments are attached at the end of the appendix.

COMMENTS PERTINENT TO SECTION D OF THE REPORT

1. The Need for Timely Publication of HEGIS Data

The conference participants unanimously agreed that it was absolutely necessary to achieve the timely publication of HEGIS data. Following are the comments received concerning the various possibilities suggested for achieving this objective.

A. Regulating Quantities of Data Through Establishment of Priorities

While those commenting agreed that the idea of regulating the amount of data collected through use of priorities should be pursued, the responses indicated that there was little likelihood of obtaining consensus on what those priorities should be. The considerable differences of opinion regarding the relative importance of financial, employee, and facilities data were obvious in the comments received.

B. Regulating Quantities of Data Through Use of Sampling Techniques

The comments received indicated that the possibilities of sampling should be given a serious test both as a way to improve timeliness and as a mechanism for putting some total population surveys on a two- to three-year cycle (with sampling techniques used in the intervening years). Nevertheless, while viewed as promising, there was an expressed reluctance to switch to this approach without the benefit of a thorough pilot test.

C. Regulate Quantities of Data by Selecting a Basic Core of Required Data and Obtaining These Data Prior to Collection of Detailed Back-Up Information

The following opinions were stated in argument against this approach:

1. It would still require too many data to improve timeliness significantly.
2. Data could not be provided in a timely fashion by institutions except on an estimated basis, since institutions don't have all the summary data until the detailed data are available.
3. Aggregation of institutional estimates would probably be less accurate than a single estimate made at the national level.

Other comments reflected approval of the approach, but only if the data collected could be interrelated in a useful manner. Bill Fuller suggested that the core data should relate programs (by degree level), student workloads (enrollments and student credit hours), faculty workloads (headcount and FTE faculty, faculty contract hours), budgeted expenditures, and facilities. The data could be quite aggregate for early release purposes.

The important aspect of this suggestion is the recognition that whatever the manner of collection, the data must be interrelated to be useful.

D. Changing the Quality or Accuracy of the Data

There was a generally negative reaction to this approach. While there were expressed misgivings about use of unedited data, the combination of incompleteness and lack of editing was the larger consideration.

To the extent that straight listings of unedited data from the institutions which had responded by a specified date could be useful to other institutions, the idea was endorsed.

It was also suggested that the marginal improvement obtained as a result of each step of the existing editing process be investigated with the objective of deleting certain of these steps and thereby speeding up the process.

E. Use of State Agencies as a Mechanism for Decentralizing Data Collection

The comments received in response to the preliminary draft were as varied as those expressed at the conference. Several of the comments expressed unalterable opposition, while others reflected complete approval, agreeing that state agencies should play a central role.

It was suggested that while this approach may not speed up the process, it would obviate the need for providing data to both state and federal agencies in different forms. This is, that HEGIS could be made part (or all) of a state's information system.

It was also noted that the time delays encountered in the first experiments with decentralizing to the state level (i.e., the reporting of facilities data) could be a result of the contracting process instead of a result of decentralization per se.

2. The Need for Additional Information Concerning Students

The comments received uniformly indicated agreement with this need, but added certain caveats. First, it was noted that while such data are needed, the difficulties involved in collecting these data should not be minimized. As a result, it is necessary to evaluate thoroughly the need and uses for such data and to give institutions a long lead time to prepare for the collection of the data. Second, it was noted that institutions should be asked to provide ethnic background data to only one federal agency. As a result, HEGIS should not include this item except as a replacement for data collected by the Office of Civil Rights. Third, data on other student subpopulations (i.e., handicapped, age groups, women, etc.) are required in addition to those data on ethnic groups.

It was also noted that while residence/migration data need not be collected each year, the current five-year cycle is too long.

3. The Need to Survey All Institutions of Postsecondary Education Rather Than Just Institutions of Higher Education

It was suggested that state agencies be employed as the means to develop a directory of organizations providing postsecondary education outside the normal higher education institutional framework.

4. The Need to Define the Role of State Agencies in the Collection of Information

The opinions expressed at the conference were generally repeated in the comments received. First, assigning a role in the collection process to state agencies does nothing more than create another level of bureaucracy. Second, the capability to accomplish this role varies widely from state to state, and such an arrangement would be unworkable in several states. On the other side of the argument, it was noted that a planning and data collection capability at the state level was a necessity and that HEGIS should be used as one of the vehicles for achieving this capability.

In summary, there were numerous comments arguing both for and against a well-defined role for state agencies in the collection of information.

5. The Need for More Extensive Data Analysis by NCES

It was noted that particular attention should be given to interpretation and analysis of data. It was also suggested that more analytic work be performed under contract to NCES.

6. The Need to Convince Institutions to Remove Confidentiality Restrictions from Data Submitted

There was consensus that institutions should be urged to remove confidentiality restrictions. Further, it was suggested that NCES indicate which institutions do not require confidentiality as an aid to state and regional reporting.

7. The Need for Obtaining Information to Support Decisions Regarding Modes of Instruction

There were two comments with regard to this item. First, special studies are the appropriate means for obtaining most information of this type. Secondly, increasing attention should be directed toward obtaining information on acceptance of credit for non-traditional education.

8. The Need to Coordinate Data Collection Efforts

It was generally agreed that NCES should coordinate all higher education data collection efforts insofar as possible, not only with other federal agencies but with professional associations. It was also generally agreed that NCES should serve as a central repository of those higher education data available from all sources.

COMMENTS PERTINENT TO SECTION E OF THE REPORT

1. Priorities for HEGIS VII

The comments received concerning the priorities for HEGIS VII were:

- a. A strong objection to deletion of the facilities schedule.
- b. A request for higher priorities for finance data.
- c. A suggestion that finance and employee data should be of higher priority than enrollment and degrees awarded data.
- d. A reminder that collection of economic background data should also include collection of financial aid data.

2. Technical Details on Specific HEGIS Schedules

As a general comment about this section, it was noted that it represented only a partial analysis of the existing forms performed by a limited number of people from unrepresentative backgrounds. Therefore, while the recommendations included in the report are good, they should not in any way be interpreted as comprehensive. In conjunction with this comment it was suggested that NCES be asked to review systematically all forms with specially formed groups after sending out a general evaluation forms to both data suppliers and data users.

There was also a specific comment that student financial aid data be collected with economic background data.

GENERAL COMMENTS

In addition to comments about specific items in the preliminary draft of the conference report, many comments of a more general nature were received. Following is a list of these comments:

1. Institutions and state agencies were not as well represented as they should have been. In particular, there were too few representatives of community colleges and private institutions.
2. The conference failed to come to grips with the question of who HEGIS serves as its first priority. There is still no clear definition as to the purposes which HEGIS should serve. In summary, there is an insufficient rationale underlying the Higher Education General Information Survey. Without this rationale the discussions too often turn to what it would be "nice" to have.
3. More emphasis on program orientation is a necessity. The structure of HEGIS must provide for some measure of workload (with Student Credit Hours recommended) and for the collection of data in ways which will indicate the resources devoted to the production of these outputs. It was noted that HEGIS is not sufficiently integrated to provide a useful basis for analysis.
4. The conference approach to the problems of detailed questionnaire revision were unsatisfactory. A better mechanism must be developed.
5. The conference participants in particular and the higher education community in general should receive feedback from NCES concerning the disposition of the recommendations which grew out of the conference.
6. In order to improve HEGIS, it is necessary to improve institutional and statewide data collection capabilities. It was recommended that the Office of Education sponsor development work aimed at the implementation of the NCHEMS Data Elements Dictionary.
7. NCES should pilot test data collection instruments prior to collection from the universe and should provide institutions at least nine months lead time when major revisions are made to a schedule.
8. Much more information must be provided regarding the information needs of state and federal users. The real decision makers at these levels must play a much more substantive role in future conferences.

9. For federal purposes, less detailed data rather than more detailed data would be appropriate. (See Report of Work Group F).
10. Much more widespread communication of available data, both that collected by NCES and that collected elsewhere, should be provided.
11. Participants at future conferences should particularly include representatives from institutions offering nontraditional forms of the educational experience.
12. An effort should be made, through all possible channels, to obtain more financial support for NCES in order to provide for more analysis and interpretation of data collected and for a wider dissemination of information.
13. Coordination of data collectors is an absolute necessity. This coordination must serve to avoid duplication, to fill in gaps in the data, and to provide for useful interrelationships of data gathered by different organizations.

APPENDIX D

RECOMMENDATIONS CONCERNING HEGIS VII MADE AT THE
NATIONAL REVIEW MEETING OF THE PERSONNEL CLASSIFICATION
MANUAL PROJECT, BOULDER, COLORADO, JULY 20-22, 1971

RECOMMENDATIONS CONCERNING HEGIS VII MADE AT THE
NATIONAL REVIEW MEETING OF THE PERSONNEL CLASSIFICATION
MANUAL PROJECT, BOULDER, COLORADO, JULY 20-22, 1971

On July 20-22, approximately 40 individuals met in Boulder, Colorado, for the primary purpose of reviewing the preliminary draft of the Higher Education Faculty and Staff Assignment Classification Manual. A subgroup of the attendees at this meeting (Charles Allmand, University of Michigan; Peggy Heim, Wofford College; Will Holliday, Miami-Dade Community College; Edith Huddleston, NCES; and Dennis Jones, NCHEMS) met to discuss the employees survey form for HEGIS VII. This group reinforced the recommendations made at the HEGIS conference by suggesting:

- a. That HEGIS VII not include requests for information which will be affected by the classification scheme proposed in the Higher Education Faculty and Staff Assignment Classification Manual.
- b. That the list of positions included in the survey of administrative salaries be included in the Higher Education Faculty and Staff Assignment Classification Manual. (This list of positions is a combination of the current OE list and the list being used by the College and University Personnel Association (CUPA) for its survey of administrative salaries.)

In addition, it was suggested that to be truly useful, faculty salary data should reflect differences resulting from disciplines. That is, salary distributions should include the factors of rank, discipline, and sex. It was also recommended by this group that the employee data required to satisfy compliance requirements should be collected by only one government agency and that NCES through HEGIS was preferred, since this would allow better chance of coordination than would other government agencies. It was suggested, therefore, that efforts be undertaken to achieve the combination of the HEW compliance report and the HEGIS employee data survey.

Considerable discussion was directed toward the question of whether or not a monthly rate could be substituted for the salary information currently collected. Chuck Allmand indicated that, from an institutional point of view, he was much more interested in obtaining information about monthly or annual rates of pay and that contract amounts were not particularly useful to him because of the widely varying nature of the contract periods and conditions. On the other hand, it was noted that AAUP was much more interested in the total compensation agreed upon between the individual and the institution and that rate of pay was insufficient for their purposes. Implication of the discussion was that no current recommendation concerning this issue could be made until a much more definitive statement as to the users and purposes of HEGIS data could be made.

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